

Political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases

Report by the Director-General

1. The governing bodies of WHO requested the Director-General to submit information about the following requested actions to the Executive Board at its 150th session. See Table 1.

Table 1. Actions requested of the Director-General in decisions or resolutions of the World Health Assembly and the United Nations General Assembly

Decision or resolution	Action	Location in this document
WHA74(10) (2021)	Present an implementation road map 2023–2030 for the global action plan for the prevention and control of noncommunicable diseases 2013–2030	Annex 1
WHA74.4	Develop recommendations to strengthen and monitor diabetes responses within national noncommunicable disease programmes, including considering the potential development of targets in this regard	Annex 2
WHA74.5	Develop a draft global strategy on oral health	Annex 3
United Nations General Assembly resolution 73/2 (2018) ¹	Develop recommendations on how to strengthen the design and implementation of policies, including those for resilient health systems and health services and infrastructure, to treat people living with noncommunicable diseases and to prevent and control their risk factors in humanitarian emergencies	Annex 4
WHA73.10 (2020)	Develop an intersectoral global action plan on epilepsy and other neurological disorders in support of universal health coverage	Annex 7
EB146(14) (2020)	Develop an action plan (2022–2030) to effectively implement the global strategy to reduce the harmful use of alcohol as a public health priority	Annex 8 ²
WHA74.4	Develop recommendations for the prevention and management of obesity over the life course, including considering the potential development of targets in this regard	Annex 9
WHA74(11)	Develop a workplan for the global coordination mechanism for the prevention and control of noncommunicable diseases	Annex 10

¹ In response to para. 40 of General Assembly resolution 73/2 and as a follow-up to Annex 9 to document EB148/7.

² The draft action plan is contained in the Appendix to Annex 8, contained in document EB150/7 Add.1.

2. The report is also submitted in response to decision WHA72(11) (2019), in which the Health Assembly requests the Director-General “to consolidate reporting on the progress achieved in the prevention and control of noncommunicable diseases and the promotion of mental health with an annual report to be submitted to the Health Assembly through the Executive Board, from 2021 to 2031, annexing reports on implementation of relevant resolutions, action plans and strategies, in line with existing reporting mandates and timelines”. Table 2 sets out the corresponding elements of this report.

Table 2. Mandates from paragraph 3(e) in decision WHA72(11) for progress reports in this document

Progress achieved in the prevention and control of noncommunicable diseases and the promotion of mental health, including the following topics and the mandating resolution or decision:	Location in this document
<ul style="list-style-type: none"> • resolution WHA73.2 (2020) on the global strategy to accelerate the elimination of cervical cancer as a public health problem and its associated goals and targets for the period 2020–2030 	Annex 5
<ul style="list-style-type: none"> • resolution WHA66.10 (2013) on the follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases • decision WHA72(11) (2019) on the follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases 	Annex 6

CONTEXT

3. The recommended approaches set out in the Annexes to this report need to be set in the context of the commitments made by Member States at the United Nations General Assembly and the guidance provided by the World Health Assembly to realize these commitments.

4. At the United Nations General Assembly, Member States have committed, inter alia, to consider:

- setting national targets for 2025 and process indicators for the prevention and control of noncommunicable diseases (NCDs) based on national situations, taking into account the nine voluntary global targets for NCDs;
- developing or strengthening national multisectoral policies and plans to achieve the national targets by 2025, taking into account WHO’s extended global action plan for the prevention and control of noncommunicable diseases 2013–2030 (NCD-GAP);
- developing practicable ambitious national responses to the overall implementation of the 2030 Agenda for Sustainable Development, including target 3.4 (By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being) of the Sustainable Development Goals (SDGs) and other NCD-related SDG targets;
- strengthening efforts to address NCDs, including cardiovascular diseases, cancer, chronic respiratory diseases and diabetes, as part of universal health coverage (UHC);
- promoting and implementing policy, legislative and regulatory measures, including fiscal measures as appropriate, aiming at minimizing the impact of the main risk factors for NCDs.

5. To this end, Member States confirmed at the World Health Assembly the objectives of the extended NCD-GAP and the comprehensive mental health action plan 2013–2030 in order to operationalize the commitments made and contribute to the achievement of the NCD-related goals and targets of the 2030 Agenda.

6. The draft implementation road map 2023–2030 for the NCD-GAP (Annex 1) included in this report will guide and support Member States to take urgent measures, in 2023 and beyond, to accelerate progress and reorient and accelerate their domestic action plans with a view to placing themselves on a sustainable path to achieve the nine voluntary global NCD targets and SDG target 3.4 as measured by SDG indicator 3.4.1 (By 2030, reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being). The draft recommendations to strengthen and monitor diabetes responses (Annex 2) and the recommendations for the prevention and management of obesity over the life course, including considering the potential development of targets in this regard (Annex 9) will support Member States in addressing gaps where progress has been negative. The draft action plan (2022–2030) to effectively implement the global strategy to reduce the harmful use of alcohol as a public health priority (Annex 8) will support Member States in taking action on a risk factor where progress has slowed down in recent years. The draft intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 (Annex 7) and the global strategy on oral health (Annex 3) will support Member States in taking action in areas where the burden is large, growing and underestimated. The draft recommendations on how to treat people living with noncommunicable diseases and prevent and control their risk factors in humanitarian emergencies (Annex 4) will support Member States and will help to ensure the continuum and provision of essential health services and public health functions, in line with humanitarian principles. The draft work plan of the WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases (Annex 10) will mobilize and share knowledge, and amplify the voices of, and raise awareness about, people living with and affected by noncommunicable diseases.

ACTION BY THE EXECUTIVE BOARD

7. The Board is invited to consider the following draft decision:

The Executive Board, having considered the report on the political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases,¹ decided to recommend that the Seventy-fifth World Health Assembly note the report and its annexes, and that it adopt:

- the implementation road map 2023–2030 for the global action plan for the prevention and control of noncommunicable diseases 2013–2030;²
- the recommendations to strengthen and monitor diabetes responses within national noncommunicable disease programmes, including potential targets;³
- the global strategy on oral health;⁴

¹ Document EB150/7.

² See document EB150/7, Annex 1.

³ See document EB150/7, Annex 2.

⁴ See document EB150/7, Annex 3.

- the recommendations on how to strengthen the design and implementation of policies, including those for resilient health systems and health services and infrastructure, to treat people living with noncommunicable diseases and to prevent and control their risk factors in humanitarian emergencies;¹
- the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031;²
- the action plan (2022–2030) to effectively implement the global strategy to reduce the harmful use of alcohol as a public health priority;³
- the recommendations for the prevention and management of obesity over the life course, including considering the potential development of targets in this regard;⁴
- the workplan for the global coordination mechanism on the prevention and control of noncommunicable diseases 2022–2025.⁵

¹ See document EB150/7, Annex 4.

² See document EB150/7, Annex 7.

³ See document EB150/7, Annex 8; see also document EB150/7 Add.1, which contains the Appendix to Annex 8.

⁴ See document EB150/7, Annex 9.

⁵ See document EB150/7, Annex 10.

ANNEX 1

**DRAFT IMPLEMENTATION ROAD MAP 2023–2030 FOR THE
GLOBAL ACTION PLAN FOR THE PREVENTION AND
CONTROL OF NONCOMMUNICABLE DISEASES 2013–2030****Mandate**

1. Decision WHA74(10) requested the WHO Director-General to submit “an implementation road map 2023–2030 for the global action plan for the prevention and control of noncommunicable diseases 2013–2030, through the Executive Board at its 150th session, and subsequent consultations with Member States¹ and relevant stakeholders, for consideration by the Seventy-fifth World Health Assembly”.

Scope, purpose, and modalities

2. The global attention paid to NCDs over the past two decades has been insufficient to reduce the burden of NCDs against the nine voluntary targets of the NCD-GAP and SDG target 3.4 as measured by SDG indicator 3.4.1. There has also not been a significant change in the trends for NCD risk factors, except for tobacco, across the WHO regions over the past decade.² Health system capacity has not kept up with the needs of NCDs and is reflected in the lack of progress in the NCD service coverage domain of the UHC Global Monitoring Report.

3. The heterogeneity in the epidemiology of NCDs across countries and regions, as well as local sociocultural, economic and political contexts, implies that countries need to take divergent domestic routes towards meeting SDG target 3.4 and the NCD-GAP targets. Pathway analyses show that every country still has options for achieving the global NCD targets.³ Combinations of priority interventions for risk factors and diseases specific to the in-country context, along with domestic capacity for ensuring action across government sectors, can help in the acceleration of NCD response.^{4,5}

4. The purpose of the implementation road map is to guide and support Member States to take urgent measures, in 2023 and beyond, to accelerate progress and reorient and accelerate their domestic action plans with a view to placing themselves on a sustainable path to meeting the nine voluntary global NCD targets and SDG target 3.4.

5. The NCD-GAP with its six objectives will be the guidance for the development and strengthening of national NCD response plans. The NCD Global Monitoring Framework’s nine voluntary global targets for 2025 will remain as they are, with the premature mortality target aligned to SDG target 3.4

¹ And, where applicable, regional economic integration organizations.

² World Health Statistics 2020. A visual summary. Geneva: World Health Organization; 2020.

³ NCD Countdown Collaborators. NCD Countdown 2030: pathways to achieving Sustainable Development Goal target 3.4. *Lancet*. 2020; 396:918–934. doi: 10.1016/S0140-6736(20)31761-X.

⁴ In line with United Nations General Assembly resolution 68/300, para. 30(a)(vii).

⁵ In line with United Nations General Assembly resolution 68/300, para. 30(a)(viii).

and the target for reducing physical inactivity updated by the Health Assembly in 2021.¹ The target on reducing harmful use of alcohol is under revision and the outcome will be used for the road map.

6. The implementation road map, while focusing on the “4 by 4 NCD agenda” (tobacco use, the harmful use of alcohol, unhealthy diet, physical inactivity, cardiovascular diseases, cancer, diabetes and chronic respiratory diseases) as per the mandate, will have to be implemented in full alignment with the commitments to reduce air pollution and promote mental health and well-being (the “5 by 5 NCD agenda”).²

7. The development of the road map will be completed before the end of 2022 as a technical product that will integrate all WHO recommended interventions and technical packages for the prevention and control of NCDs. It will also catalyze action in other areas of work against NCDs such as eye, ear and hearing care. The road map is expected to serve as an overarching guide for regions and countries, United Nations system organizations and non-State actors to accelerate ongoing national NCD responses, including by strengthening and reorienting multisectoral action plans; scaling up health system capacity for NCDs through primary health care (PHC) and UHC; and strengthening national capacity, leadership, governance and partnerships for the period 2023 to 2030, taking into account new developments since 2013.

Strategic directions for implementing the NCD-GAP

Strategic direction 1: Accelerate national response based on the understanding of NCDs epidemiology and risk factors and the identified barriers and enablers in countries

1.1 EVALUATE THE PROGRESS MADE IN ACHIEVING THE TARGETS ON PREVENTION AND CONTROL OF NCDs

8. WHO has updated the data on cause-specific mortality to characterize the risk and trends in NCD mortality in each country and has evaluated combinations of NCDs that contribute to premature mortality. Heat maps for each country have been published on WHO’s website to indicate the probability of premature death from NCDs.³

1.2 Identify barriers to implementing cost-effective interventions across prevention and control of NCDs

9. A number of common domestic challenges to implement the best buy and other recommended interventions for the prevention and control of NCDs were identified in the report of the United Nations Secretary-General to the General Assembly in 2017.⁴ However, countries should complement and contextualize specific barriers and enablers relevant in their national contexts.

¹ See resolution WHA71.6 (2018).

² See document A72/19.

³ Implementation road map 2023–2030 for the global action plan for the prevention and control of NCDs 2013–2030. Geneva: World Health Organization.

⁴ See document A71/14.

10. Countries should systematically examine their progress using WHO guidance and tools, in introducing evidence-based national guidelines, protocols and standards for the prevention and management of NCDs, including health system strengthening in PHC and including NCDs in UHC, policies for inclusion of NCDs in emergencies in humanitarian settings¹ and migrants, among other vulnerable groups and policies for NCDs research. Reducing inequity is critical for achieving the desired outcomes.

11. The ongoing COVID-19 pandemic poses further challenges for creating and maintaining healthy environments and people living with NCDs are at increased risk of severe illness and death due to COVID-19. NCDs needs to be part of the national preparedness and response plans. The economic effects of the pandemic are likely to have a long-term impact on NCD prevention and control.

Strategic direction 2: Prioritize and scale up the implementation of most impactful and feasible interventions in the national context

2.1 ENGAGE

12. Countries should accelerate their capacity for multisectoral and multistakeholder collaborations at national and subnational levels, including by identifying complementary opportunities where non-State-actors can contribute to strengthening the national NCD response.

13. Heads of State and Government can provide strategic leadership for the prevention and control of NCDs by promoting policy coherence and coordination through whole-of-government and Health in All Policies approaches and by engaging stakeholders, when appropriate and taking due consideration of their potential conflict of interest with public health goals.^{2,3}

14. The WHO's global coordination mechanism on the prevention and control of noncommunicable diseases (GCM/NCD) will facilitate the multisectoral collaboration and multistakeholder engagement for strengthening national NCD responses and sustain the meaningful involvement of people living with NCDs in support of effective, equitable and inclusive national NCD policies, programmes and services.

15. Meaningful engagement of people with lived experience of NCDs in co-creation, co-design, implementation and accountability should be a key element of delivering interventions in a people-centred manner.⁴ Such collaborations can be fostered by civil society organizations, many of which are formed and supported by patients and their families.

16. International partners can support and strengthen research and innovation by working with academic partners and research institutions in countries.

17. Countries may consider optimizing the complementary expertise and resources of private sector actors in health care systems, the availability of medicines, service delivery and monitoring, while giving

¹ Integrating NCD care in humanitarian settings. An operational guide. Geneva: UNHCR; 2020 (<https://www.unhcr.org/5fb537094.pdf>, accessed 1 December 2021).

² United Nations General Assembly resolution 73/2, para. 17.

³ United Nations General Assembly resolution 73/2.

⁴ Nothing for Us Without Us. Geneva: World Health Organization; 2021.

due regard to managing conflicts of interest¹ and ensuring that such engagements directly contribute to the implementation of national NCD responses to reach specific health objectives.² WHO will develop a tool to support national governments in assessing the landscape and meaningfully engaging with the private sector in NCD prevention and control.

18. The United Nations Interagency Task Force on the Prevention and Control of Non-Communicable Diseases will ensure that the road map is fully supported by the United Nations system as a whole, in line with the Task Force's strategic priorities, which include: (i) supporting countries to deliver multisectoral action on meeting NCD-related SDG targets; (ii) mobilizing resources to support the development of national responses; and (iii) harmonizing action and forging partnerships. The new United Nations Multi-Partner Trust Fund to Catalyze Country Action for NCDs and Mental Health, which has been established by WHO, the United Nations Children's Fund (UNICEF) and the United Nations Development Programme, will be an enabler for implementing the road map.

2.2 ACCELERATE

2.2.1 Accelerate the implementation of the most cost-effective and feasible NCD interventions in the national context

19. WHO best buy and other recommended interventions³ are a set of cost-effective and feasible interventions for implementation in all settings, especially in low-income and lower-middle-income countries. WHO will propose updates to the set of interventions to the World Health Assembly in 2023, through the Executive Board.⁴ The updated set of cost-effective interventions for NCD prevention and management will be a guide to select locally relevant and scalable interventions.

20. At national level, the Global Strategy to Accelerate Tobacco Control: Advancing Sustainable Development through the Implementation of the WHO FCTC 2019–2025,⁵ WHO's global strategy to reduce the harmful use of alcohol and its global action plan, WHO's global action plan on physical activity 2018–2030⁶ and WHO guidance and tools for promoting a healthy diet⁷ should be implemented to scale, fostering coherence across sectors and also making them part of good governance in every country.

21. Countries can implement fiscal measures, as appropriate, aiming at minimizing the impact of the main risk factors for NCDs.⁸ Countries can therefore include health taxes in their revenue programmes and link these to NCD prevention and control. Within the recommended packages for reducing the use of tobacco and the harmful use of alcohol, raising excise taxes on tobacco and alcohol products are among the most effective and cost-effective measures.

¹ In line with United Nations General Assembly resolution 73/2, para. 43.

² In line with United Nations General Assembly resolution 73/2, para. 44.

³ Updated Appendix 3 to the NCD–GAP. Geneva: World Health Organization; 2017.

⁴ In line with paragraph 3(a) of decision WHA72(11).

⁵ Geneva: World Health Organization; 2019.

⁶ Geneva: World Health Organization; 2018.

⁷ Healthy diet. Geneva: World Health Organization; 2020 (<https://www.who.int/news-room/fact-sheets/detail/healthy-diet>, accessed 1 December 2021).

⁸ In line with para. 21 of United Nations General Assembly resolution 73/2.

22. With the support of partners, WHO has developed special initiatives and technical packages for reducing NCD risk factors, control of the four major NCDs and rehabilitation for people experiencing disability in order to enable countries to implement evidence-based interventions. The packages include tools to support local adaptation and implementation. Detailed descriptions of the available packages and initiatives are available on the website.¹

2.2.2 A web-based simulation tool to select a prioritized set of NCD interventions for countries

23. To support countries in prioritizing and scaling up interventions, a web-based simulation tool will be developed in 2022. It will use mathematical models to estimate the health impact of the recommended interventions at the national level in the period up to 2030 and beyond. A visual representation of the scale to which the intervention can be implemented and the corresponding impact on premature mortality will help countries to identify a set of key accelerators tailored to their specific epidemiological situation. The tool developed by the University of Washington for cardiovascular diseases is a prototype of the proposed tool.²

2.2.3 Strengthen NCD prevention and control in PHC for promoting equitable access and quality of care

24. NCD prevention and control is weak in PHC in many countries. The strengthening and scale-up of NCD interventions in PHC will help to improve access and equitable coverage. Primary care is the first responder and gatekeeper for NCDs. Early diagnosis and good control of NCDs and their risk factors in primary care will reduce the disease complications that are leading to catastrophic health expenditures and premature deaths. The Operational Framework for Primary Health Care³ provides guidance for countries to strengthen PHC systems through intersectoral actions and by empowering individuals and communities. The WHO PEN app provides the package for primary care as an easy access digital solution.⁴ Referral care is also critical to manage complications of NCDs.

2.2.4 Ensure that UHC benefit packages include prevention and control of NCDs

25. Progressive realization of UHC can contribute to the achievement of the right to health. Consideration of the positive value of financial risk protection is particularly relevant for NCD priority-setting given the long-term cost implications for the patient and their household. The 2019 Global Monitoring Report indicates that there has been no pronounced progress for the NCD component since 2000 and this situation will have to be addressed in all countries.⁵

¹ Governance of WHO's leadership and coordination role in promoting and monitoring global action against noncommunicable diseases. Geneva: World Health Organization.

² Calculating lives saved by cardiovascular health interventions. University of Washington (<https://dcp-uw.shinyapps.io/RTSL2/>, accessed 1 December 2021).

³ World Health Organization and United Nations Children's Fund; 2020.

⁴ WHO Package of Essential Noncommunicable (PEN) disease interventions for primary health care. Geneva: World Health Organization; 2020.

⁵ Primary Health Care on the Road to Universal Health Care. 2019 Global Monitoring Report. Geneva: World Health Organization; 2019.

26. The WHO UHC Compendium provides a set of interventions for NCD and risk factors that can be included in national UHC benefit packages. UHC is not comprehensive or universal until essential NCD packages and services are included and scaled up.

27. Countries will need to balance the demands of responding directly to the COVID-19 pandemic with preparing for other health emergencies, while maintaining strategic planning and coordinated action to maintain essential health service delivery, especially for NCDs.¹

2.2.5 Sustainable financing

28. Sustainable financing is required for countries to support population-level interventions and reduce the unmet need for services and financial hardship arising from out-of-pocket payments. Countries should incrementally increase the allocation for health and within that for NCDs. This also involves improving the effectiveness of catalytic funding support. Out-of-pocket expenditure can be reduced only when NCDs are well covered under financial protection schemes in countries.

2.2.6 Build back better with implementation research, innovation and digital solutions

29. Meeting the objectives and targets of the NCD-GAP and SDG target 3.4 in a post-COVID-19 world requires a concerted response and integration of the NCD agenda into existing global and national efforts to rebuild resilient health systems.

30. Implementation research can identify how to implement policies and interventions in contexts in which populations and/or resources may differ from the contexts in which they were initially formulated and evaluated. It can also identify the reasons for the lack of impact in programme implementation.²

31. New technologies, including digital interventions, can be leveraged to scale up population-wide screening and early diagnosis and support self-care and management for people living with NCDs.

32. Service delivery models will have to be reviewed and repurposed to ensure that basic diagnostics, technology and medicines, along with a trained workforce in adequate numbers, are available to deliver interventions for NCDs.

2.3 ALIGN

33. The Global Action Plan for Healthy Lives and Well-being for All³ brings together stakeholders to accelerate progress towards the health-related SDGs, including NCD-related goals and targets. As countries are advancing multiple SDG targets, this alignment will help to integrate the prevention and management of NCDs within the broader SDG Agenda.

34. The NCD implementation road map recognizes that mental disorders and other mental health conditions contribute to the global NCD burden. The efforts to meet the objectives of the comprehensive mental health action plan 2013–2030 aligns with the expansion of the “4 by 4 NCD agenda” to the “5 by 5 NCD agenda” encompassing mental health and air pollution, as well as synergizing with

¹ COVID-19 Partners Platform. Pillar 9. Geneva: World Health Organization.

² A guide to implementation research in the prevention and control of noncommunicable diseases. Geneva: World Health Organization; 2016.

³ Stronger Collaboration, Better Health. Geneva: World Health Organization; 2019.

SDG indicator 3.4.2 (Suicide mortality rate). The WHO menu of cost-effective interventions for mental health¹ and the WHO air quality guidelines² can be considered along with other NCD interventions, as appropriate to the local context.

35. Health promotion and health literacy are enablers for tackling NCD prevention and control, decreasing the NCD burden and ensuring sustainability of health systems. Settings-based approaches, especially healthy settings, can help to amplify NCD interventions, including actions to address socioeconomic and commercial determinants.

Strategic direction 3: Ensure timely, reliable and sustained national data on NCD risk factors, diseases and mortality for data driven actions and to strengthen accountability

3.1 ACCOUNT

36. Investing in surveillance and monitoring is essential to obtain reliable and timely data at national and subnational levels in order to prioritize interventions, assess implementation and learn from the impact of NCD prevention and control. Periodic NCD risk-factor surveys, country capacity assessments, disease registries, health facility-level data, as appropriate, and reliable vital registration are critical for prioritizing and selecting the most appropriate and cost-effective interventions for NCD prevention and control.

37. WHO will update the status of NCD prevention and control through a web portal to bring together data from different sources and render it comparable in order to allow the tracking of global, regional and cross-country progress. Countries should be able to track their progress across the NCD Global Monitoring Framework in the web portal. WHO will work towards reflecting NCD-related indicators in health systems performance and access to health care metrics.

38. NCD measures should be included as integral components of the national and subnational health information systems aligned with the WHO SCORE package.³

RECOMMENDED ACTIONS

The recommended actions for Member States to be taken in 2022 include:

39. Assess the current status of domestic NCD responses against the nine global voluntary NCD targets and the SDG target on NCDs and identify the barriers and opportunities for scaling up the national NCD response, including:

- (a) strengthen the national capacity for the governance of multistakeholder engagement, cross-sectoral collaboration and meaningful and effective partnerships;

¹ WHO menu of cost-effective interventions for mental health. Geneva: World Health Organization; 2021.

² WHO global air quality guidelines. Particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide. Geneva: World Health Organization; 2021.

³ SCORE for Health Data Technical Package. Geneva: World Health Organization (<https://www.who.int/data/data-collection-tools/score>, accessed 1 December 2021).

- (b) strengthen national monitoring and surveillance systems for NCDs and their risk factors for reliable and timely data; and
- (c) prioritize research to enhance the understanding of the epidemiology of NCDs and their risk factors, their social, economic and commercial determinants and multilevel and multisectoral governance, and invest in translational and implementation research to advance NCD prevention and control.

The recommended actions for international partners to be taken in 2022 include:

40. Assist and support in the development of the implementation road map across the strategic directions and actions at global, regional, country and local levels.

The recommended actions for the Secretariat to be taken in 2022 include:

41. Complete the development of the implementation road map 2023–2030 for the NCD-GAP and publish it (as a technical product – WHO public health good), including:

- (a) develop an NCD data portal in order to provide a visual summary of all NCD indicators and to facilitate countries in tracking their progress;
- (b) develop heat maps for countries to identify specific NCDs and their contribution to the premature mortality;
- (c) propose updates focused on the prevention and management of NCDs to Appendix 3 to the NCD GAP 2013–2030,¹ in consultation with Member States, United Nations organizations and non-State actors, for consideration by Member States at the World Health Assembly in 2023, through the Executive Board;
- (d) develop a web-based simulation tool, using interventions for NCDs that are updated with the latest evidence and aligned to PHC and UHC frameworks in order to support countries in identifying priority interventions-based on their national context;
- (e) develop guidance in order to promote policy coherence for NCDs and risk factors among all relevant government sectors and involving relevant stakeholders, by establishing or strengthening national governance mechanisms that can guide integrated, coordinated, coherent NCD responses;
- (f) develop guidance to support Member States in making informed decisions on pursuing meaningful multistakeholder collaboration, including with the private sector and civil societies, that aligns with and further advances national NCD responses;
- (g) the WHO Innovation Scaling Framework will help to scale up NCD prevention and control by harnessing research, innovation and digital solutions; and

¹ Updated Appendix 3 to the NCD–GAP. Geneva: World Health Organization; 2017.

- (h) develop guidance for the meaningful engagement of people living with NCDs and mental health conditions in order to support WHO and Member States in the co-development and co-design of NCD principles, policies, programmes and services.

ANNEX 2

**DRAFT RECOMMENDATIONS TO STRENGTHEN AND MONITOR
DIABETES RESPONSES WITHIN NATIONAL NONCOMMUNICABLE
DISEASE PROGRAMMES, INCLUDING POTENTIAL TARGETS****CHALLENGES AND OPPORTUNITIES**

1. Never in the past has our knowledge been so profound and the modalities to prevent diabetes and treat all people living with diabetes so great. And yet, many people and communities in need of effective prevention, life-enhancing and live-saving treatment for diabetes do not receive them.

(a) The global age-adjusted prevalence of diabetes among adults over 18 years of age rose from 4.7% in 1980 to 8.5% in 2014.¹ Today, more than 420 million people are living with diabetes worldwide. This number is estimated to rise to 578 million by 2030 and to 700 million by 2045.² One in two adults with diabetes are unaware of their condition.

(b) Diabetes is a major cause of blindness, kidney failure, heart attacks, stroke and lower limb amputation, especially in people who are unaware of the condition or if it is insufficiently managed.

(c) People with type 1 diabetes need insulin to survive. Today there is a high prevalence of diabetic ketoacidosis at the point of diagnosis worldwide. Efforts to improve earlier diagnosis of diabetes is critical for type 1 diabetes and initiation of insulin treatment in order to prevent deaths.³

(d) Although the overall number of diabetes deaths increased markedly from 2000 to 2019, the proportion of diabetes deaths occurring under the age of 70 has decreased by 2%.⁴

(e) The increasing prevalence of type 2 diabetes is largely caused by the increasing prevalence of obesity and concurrent physical inactivity. The global prevalence of overweight and obesity among children and adolescents aged 5–19 has risen dramatically, from 4% in 1975 to more than 18% in 2016.⁵ In 2019, only 40% of countries have an operational policy that addresses

¹ Global report on diabetes. Geneva: World Health Organization; 2016.

² Saeedi P, Petersohn I, Salpea P, Malanda B, Karuranga S, Unwin N, et al. IDF Diabetes Atlas Committee. Global and regional diabetes prevalence estimates for 2019 and projections for 2030 and 2045: Results from the International Diabetes Federation Diabetes Atlas, 9th edition. *Diabetes Res Clin Pract* 2019;157:107843. doi: 10.1016/j.diabres.2019.107843.

³ Cherubini, V, Grimsmann, JM, Åkesson, K, Birkebæk, NH, Cinek, O, Dovč, K, et al. Temporal trends in diabetic ketoacidosis at diagnosis of paediatric type 1 diabetes between 2006 and 2016: results from 13 countries in three continents. *Diabetologia*, 63(8), 1530–1541. doi: 10.1007/s00125-020-05152-1.

⁴ Global Health Estimates 2019: Deaths by Cause, Age, Sex, by Country and by Region, 2000–2019. Geneva: World Health Organization; 2020.

⁵ Obesity and overweight. Key facts. Geneva: World Health Organization; 2021 (<https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>, accessed 1 December 2021).

overweight and obesity.¹ Tobacco smokers are 30–40% more likely to develop type 2 diabetes than non-smokers.²

(f) The global cost of diabetes has been estimated at US\$ 1 trillion–31 trillion or 1–8% of global gross domestic product (GDP) in 2015. While the main drivers of cost are hospital inpatient and outpatient care, indirect costs accounted for 34.7% of the total burden, mostly attributable to production losses due to labour-force dropout and premature mortality.³

(g) Some 27 % of countries do not have an operational policy, strategy or action plan for diabetes, while 20% do not have one for reducing unhealthy diets and physical inactivity.¹

(h) Limited progress has been seen in preventing and treating diabetes as part of efforts to meet SDG target 3.8 (Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all). The 2019 Global Monitoring Report shows that diabetes health services are conspicuous by their lack of progress as part of UHC in comparison to those for communicable diseases.⁴ Only two thirds of countries report having time-bound NCD targets, which may include targets of no increase in diabetes and obesity and improved access to medicines and technologies, in line with the nine voluntary global targets of the WHO Global Monitoring Framework. A recent review by the Secretariat of progress towards the target of halting the rise of diabetes against a 2010 baseline showed that only 14 countries are expected to be on track by 2025, with no additional countries achieving the target by 2030.

(i) In general, PHC facilities in low-income countries do not have the basic technologies needed to diagnose and manage diabetes.¹ Globally, essential medicines for diabetes are reported to be generally available in about 80% of facilities in the public health care sector.¹ However, they are available in only about one half of such facilities in low-income and lower-middle-income countries.

(j) Insulin and associated health technology products remain unaffordable in many countries, particularly for patients paying out-of-pocket or for health systems in many low- and middle-income countries that are unable to provide sustained and equitable coverage for all people with diabetes due to the high prices of these products. Effective public policy-making to increase

¹ Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 global survey. Geneva: World Health Organization; 2020.

² The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. Executive Summary. Rockville, MD, U.S. Department of Health and Human Services; 2014 (<https://www.hhs.gov/sites/default/files/consequences-smoking-exec-summary.pdf>, accessed 1 December 2021).

³ Bommer C, Heesemann E, Sagalova E, Manne-Goehler J, Atun R, Bärnighausen T, et al. The global economic burden of diabetes in adults aged 20–79 years: a cost-of-illness study. *Lancet Diabetes Endocrinol* 2017; 5: 423–30. doi: 10.1016/S2213-8587(17)30097-9.

⁴ Primary Health Care on the Road to Universal Health Care. 2019 Global Monitoring Report. Geneva: World Health Organization; 2019.

access to affordable medicines and health products requires the use of evidence derived from the accurate analysis of reliable and transparent data on prices and availability.^{1,2}

(k) The COVID-19 pandemic has revealed the fragility of overstretched health care systems. A 2020 WHO survey indicated that half of the countries surveyed had partially or completely disrupted services for the diagnosis and treatment of diabetes and diabetes-related complications. One third of countries did not have diabetes in their emergency preparedness plans.³

(l) Data on diabetes derived from monitoring and surveillance systems in most countries are sparse and inadequate. Only 56% of countries have conducted a diabetes prevalence survey within the past five years. While 50% of countries, mostly high-income countries, report having diabetes registries, their predominantly hospital-based nature and limited coverage do not provide sufficient information on diabetes outcomes.⁴ Two thirds of countries do not have civil vital registration systems to capture information on cause of death. Therefore, the reliability of information on the attributable mortality related to diabetes is doubtful.

(m) In 2019, only one third of countries report having a policy or plan for NCD research and research is among the least-funded key actions of the NCD-GAP.

2. Opportunities exist to facilitate solutions to the challenges. The main opportunities are:

(a) **Tracer for all NCDs:** The optimal management of diabetes requires coordinated inputs from a range of health professionals, access to essential medicines and technologies and a system that supports patient empowerment. This has relevance beyond diabetes and diabetes could serve as a tracer condition for general comprehensiveness and the strength of national responses to NCDs.

(b) **A solid basis for scaling up:** In 2019, 85% of countries report having staff dedicated to diabetes in their NCD unit/branch/department, while 73% of countries report having an operational policy, strategy or action plan on diabetes, an increase of 45% relative to 2010. In addition, 80 % of countries report having operational policies or strategies for reducing unhealthy diet and physical inactivity and 84% of countries report having national diabetes management guidelines that are used in at least 50% of health facilities.⁵ While policies and programmes are reported to be in place in several countries, there are no clear monitoring framework or nationally agreed targets and indicators to assess the impact of these policies on diabetes prevention and control. Setting targets and indicators could stimulate effective implementation.

¹ Babar ZUD, Ramzan S, El-Dahiyat F, Tachmazidis I, Adebisi A, Hasan SS. The availability, pricing, and affordability of essential diabetes medicines in 17 low-, middle- and high-income countries. *Frontiers in pharmacology* 2019;10:1375. Doi: 10.3389/fphar.2019.01375.

² WHO guideline on country pharmaceutical pricing policies. Geneva: World Health Organization; 2015.

³ The impact of the COVID-19 pandemic on noncommunicable disease resources and services: results of a rapid assessment. Geneva: World Health Organization; 2020.

⁴ Global report on diabetes. Geneva: World Health Organization; 2016.

⁵ Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 global survey.2020. World Health Organization. Geneva .

- (c) **Towards UHC:** The political commitments towards UHC to achieve SDG target 3.8 is an opportunity to include diabetes prevention and control in benefit packages and address diabetes more effectively and equitably, as well as to ensure financial protection for the most vulnerable.
- (d) **A new perspective on NCDs:** The COVID-19 pandemic has disproportionately affected people with diabetes and this can provide an impetus to better integrate diabetes in pandemic and other emergency preparedness and response.
- (e) **Marking the 100-year anniversary of insulin:** The establishment of the Global Diabetes Compact offers an opportunity for the global diabetes community to come together to reflect on addressing barriers in accessing insulin and associated health technologies, including the promotion of convergence and the harmonization of regulatory requirements for insulin and other medicines and health products for the treatment of diabetes, as well as the assessment of the feasibility and potential value of establishing a web-based tool to share information relevant to the transparency of markets for diabetes medicines and health products.
- (f) **Harnessing digital technologies:** Increasing the use of digital technologies and improving digital literacy could enhance patient education and self-care, improve the capacity to assess and report on risk factors, on the availability and real need of essential medicines, as well as contributing to better diabetes care and outcomes. Initiatives such as the Be Healthy Be Mobile initiative, if applied to diabetes treatment, provide guidance and resources to assist countries and governments in introducing and scaling up digital solutions for diabetes.¹
- (g) **Promoting inclusiveness:** The participation of people living with diabetes and their caregivers provides essential expertise to positively impact policy design and powerful narratives to raise awareness of diabetes among the public and build commitment among policymakers. The involvement and active participation of people living with diabetes in the Global Diabetes Compact provides a platform and model for their meaningful participation and co-creation of solutions.

SETTING DIABETES COVERAGE TARGETS

3. The Secretariat, supported by an academic group, developed an approach to setting diabetes coverage targets based on a draft proposal.² The draft proposed coverage targets were subsequently discussed at a technical consultation, held on 28–29 July 2021, seeking additional expert advice on refining the methods and selection approach. The technical background paper used to develop the proposed targets is available on WHO's website along with the current discussion paper.²

¹ Be Healthy Be Mobile. A handbook on how to implement mDiabetes. Geneva: World Health Organization; 2016.

² Gregg E, Buckley J, Ali MK, Davies J, Flood D, Griffiths B, et al. Target Setting to Reduce the Global Burden of Diabetes Mellitus by 2030: (unpublished data). Geneva: World Health Organization; 2021 (<https://www.who.int/publications/m/item/improving-health-outcomes-of-people-with-diabetes-mellitus>, accessed 1 December 2021).

4. The process of selecting and prioritizing the five proposed global diabetes coverage targets entailed the following steps:

- (a) the review and development of a taxonomy of potential target metrics organized across four domains (policy or system-level factors; processes of care; intermediate outcomes; and long-term health outcomes) and risk tiers (diagnosed diabetes; high risk; whole population);
- (b) the prioritization of a subset of metrics, based on four criteria:
 - health importance or strong evidence for prediction or benefit with respect to important health outcomes;
 - modifiable and feasible via scalable interventions across diverse settings;
 - global data availability and ease of measurement, the metric being either currently available or plausibly available through scale-up of practical surveillance approaches; and
 - international gap and disparity, with a large proportion of the population affected and large international variations in term of target achievement;
- (c) the review of the current global status of the prioritized five metrics in terms of variation, levels, trends, and coverage (this assessment informed the decision to set the levels of the proposed targets); and
- (d) the estimation of the projected health impact associated with meeting versus not meeting the proposed coverage targets.

5. Following this process, the Secretariat recommends that five global diabetes coverage targets be established for achievement by 2030:

- 80% of people with diabetes are diagnosed;¹
- 80% of people with diagnosed diabetes have good control of glycaemia;
- 80% of people with diagnosed diabetes have good control of blood pressure;
- 60% of people with diabetes of 40 years or older receive statins; and
- 100% of people with type 1 diabetes have access to affordable insulin treatment² and blood glucose self-monitoring.

6. The proposed coverage targets do not constitute individual-level guideline treatment targets but global coverage targets that capture areas of missed opportunity (i.e., global diabetes diagnosis and treatment gaps), in which attention to goals will be both clearly measurable and have a strong impact on

¹ The term “people with diabetes” includes all types of diabetes. Due to the potentially fatal consequences of delayed diagnoses and the high prevalence of diabetic ketoacidosis at diagnosis, more efforts to establish earlier diagnoses of people with type 1 diabetes should be promoted worldwide.

² Including devices for insulin delivery, such as syringes and needles.

health outcomes. The proposed targets are ambitious but achievable and would have global health impact in many countries of the world.

7. In this regard, modelling projections have demonstrated that:

- achieving the target levels of diagnosis, treatment and control of three targets (glycaemia, blood pressure, and statin use) of at least 60% results in a gain in median Disability-adjusted life years (DALY) of 38 per 1000 persons over 10 years, whereas achieving a target of 80% results in a gain in median Disability-adjusted life years of 64 per 1000 persons over 10 years;¹ and
- in most regions, improving treatment and control without screening reduces the number of deaths attributable to cardiovascular disease by 25–35%, while improving diagnosis, treatment and control reduces the most common cause of deaths (deaths attributable to cardiovascular disease) by more than 40%.¹

8. Achieving the five proposed global diabetes coverage targets will contribute to the achievement of SDG target 3.4. Their achievement is also aligned with the NCD-GAP; the political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases; and health systems strengthening for social protection and UHC, as provided in United Nations General Assembly resolution 72/81.

Alignment with NCD Global Monitoring Framework and implications for monitoring

9. The proposed global coverage targets complement the NCD Global Monitoring Framework's existing target of halting the rise of diabetes, providing an additional specific and measurable set of targets related to diabetes care. The measurement of the proposed targets is expected to be mainly conducted via population-based surveys, allowing most countries to report without creating an additional data collection burden. In this regard, three of the five proposed targets are already captured by the tools used to report on the existing Global Monitoring Framework indicators.

10. The recommendations comprise a set of actions, which, when performed collectively by Member States and international partners, will tackle the growing public health burden imposed by diabetes and contribute to achieving the targets.

RECOMMENDATION FOR STRENGTHENING AND MONITORING DIABETES RESPONSES

11. Recommended actions for **Member States**:

(a) Strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of diabetes:

- Strengthen the capacity of ministries of health to exercise a strategic leadership and coordination role in diabetes policy development that engages all stakeholders across government, nongovernmental organizations, civil society, people living with diabetes and the

¹ WHO Discussion Paper dated 9 August 2021 entitled "Draft recommendations to strengthen and monitor diabetes responses within national noncommunicable disease programmes, including potential targets"
<https://www.who.int/teams/noncommunicable-diseases/governance/diabetestargets>.

private sector, ensuring that issues relating to the prevention and control of diabetes receive a coordinated, comprehensive and integrated response.

- Provide sufficient national budgetary allocation for diabetes prevention and control and identify financing mechanisms to reduce out-of-pocket expenditure.
- Strengthen the design and implementation of policies for diabetes by ensuring that existing national UHC benefit packages and NCD multisectoral strategy/policy/action plans contain the necessary provisions for diabetes prevention and management.
- Consider setting national diabetes coverage targets, building on the guidance provided by WHO, in order to progressively cover more people with quality diabetes care, increase accountability and periodically assess national capacity for the prevention and control of diabetes.

(b) Reduce modifiable risk factors for diabetes and underlying social determinants:

- Accelerate the implementation of policies and strategies to reduce risk factors for diabetes and its complications, including by identifying synergies from the recommendations for the prevention and management of obesity.¹
- Promote health literacy and strengthen the meaningful engagement of people living with diabetes in clinical decision-making, with a focus on health–professional–patient communication and education.
- Consider disproportionate diabetes burdens among subpopulations and address the underlying social determinants that expose these populations to greater risk of developing diabetes and its complications, substandard care or lack of access to essential diabetes medicines.

(c) Strengthen and orient health systems to address the prevention and control of diabetes through people-centred PHC and UHC:

- Expand the delivery of PHC and prioritize it as the cornerstone of sustainable, people-centred, community-based and integrated diabetes care.
- Set minimum standards for the early detection and management of diabetes across the continuum of care, with a focus on PHC, while strengthening referral systems between primary and other levels of care.
- Consider adopting the proposed global coverage targets to be achieved by 2030 in order to stimulate early detection and improved management and consider the adaptation of targets to local circumstances.
- Strengthen the health workforce and the institutional capacity for early detection and management of diabetes, including for the diagnosis and management of diabetes-related

¹ WHO Discussion Paper: Draft recommendations for the prevention and management of obesity over the life course, including potential targets. Geneva: World Health Organization; 2016 (<https://www.who.int/publications/m/item/who-discussion-paper-draft-recommendations-for-the-prevention-and-management-of-obesity-over-the-life-course-including-potential-targets>, accessed 1 December 2021).

complications, the provision of patient education, mental health care and psychosocial support, the promotion of self-care, and the provision of palliative care and rehabilitation.

- Ensure the availability and affordability of essential medicines and priority devices by integrating medicines, insulin delivery devices and blood glucose monitoring devices in national benefit packages.
- Ensure the uninterrupted treatment of people living with diabetes during humanitarian emergencies.
- Evaluate the impact of innovative digital health solutions.
- Include people living with diabetes in decision-making processes for policies, strategies and the implementation of diabetes prevention and control.

(d) Promote and support national capacity for high-quality research, innovation and development for the prevention and control of diabetes.

(e) Monitor the trends and determinants of diabetes and evaluate progress in their prevention and control:

- Develop and strengthen surveillance and monitoring systems for diabetes and related NCD risk factors, guided by WHO NCD surveillance framework.
- Develop and strengthen monitoring systems to evaluate treatment gaps and clinical outcomes (morbidity and mortality) and health system performance (capacity and interventions) through the systematic collection of standardized routine facility-based diabetes care indicators.

12. Recommended actions for **international partners**, including the private sector:

(a) Strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of diabetes:

- Maintain the visibility of diabetes on the global health and development agenda.
- Align international cooperation on diabetes with national plans on NCDs in order to strengthen aid effectiveness and the development impact of external resources in support of diabetes.
- Civil society to foster accountability and support countries in the regular review of progress of national diabetes road maps towards the achievement of national diabetes targets.

(b) Reduce modifiable risk factors for diabetes and underlying social determinants:

- Advocate for and support population-based policies, including food and nutrition policies, health promotion activities and health literacy campaigns.
- Advocate for and help implement and evaluate community-based diabetes prevention and control initiatives.

(c) Strengthen and orient health systems to address the prevention and control of diabetes through people-centred PHC and UHC:

- Commit to supporting activities that improve the affordability and availability of essential medicines and basic technologies for the diagnosis, management and self-care of people with diabetes.
- Support and scale up the implementation of digital health solutions based on country need assessments.
- At the same time, report and participate in the reporting mechanism that WHO will use to register and publish their contributions,¹ which could include existing data or mechanisms.
- Promote partnerships to accelerate ambitious action to increase access and care towards the Global Diabetes Compact vision and the contributions of the private sector.

(d) Promote and support national capacity for high-quality research, innovation and development for the prevention and control of diabetes:

- Invest in and support national capacity for research on diabetes prevention and control in order to inform the formulation and implementation of national policies.

(e) Monitor the trends and determinants of diabetes and evaluate progress in their prevention and control:

- Support the development and maintenance of surveillance systems and promote the use of information and communications technology.
- Invest in information systems that link various sources of information on management and outcomes.

13. Recommended actions for **WHO**:

(a) Strengthen national capacity, leadership, governance, multisectoral actions and partnerships in order to accelerate country response for the prevention and control of diabetes:

- Convene and lead partners through the Global Diabetes Compact in order to raise awareness, create synergies for action and harness the collective capacity of global, regional and national actors working to improve diabetes prevention and control.
- Support country activities for including diabetes in UHC and develop recommendations for the adequate, predictable and sustained financing of diabetes prevention and control, including in resource-constrained settings and to address the needs of disadvantaged and marginalized populations.

¹ See United Nations General Assembly resolution 68/300.

- Scale up the meaningful engagement of people with diabetes in the design, implementation and evaluation of programmes and services for diabetes.

(b) Reduce modifiable risk factors for diabetes and underlying social determinants:

- Provide guidance on the prevention of type 2 diabetes by implementing the best buy approach, health promotion and health literacy.

(c) Strengthen and orient health systems to address the prevention and control of diabetes through people-centred PHC and UHC:

- Support country adaptation and the implementation of WHO diabetes management guidelines.
- Develop technical and normative products to cover the whole spectrum of diabetes care and facilitate the implementation of evidence-based digital solutions.
- Engage the private sector in strengthening commitments and contributions in order to increase access to essential medicines and health technologies for diabetes, including the prequalification of insulin, pooled procurement and the harmonization of regulatory requirements, while giving due regard to managing conflicts of interest.
- Invite the private sector to strengthen its commitment and contribution to the prevention and management of diabetes by participating in the WHO-led task force,^{1,2} including participating in the prequalification programmes for insulin and self-monitoring devices and in international pooled-procurement mechanisms for diabetes medicines (once established) led by the United Nations and other intergovernmental organizations and international financing mechanisms, while giving due regard to managing conflicts of interest.
- Develop guidance and provide technical assistance to countries for enabling the uninterrupted treatment of diabetes during humanitarian emergencies.
- Estimate the cost of achieving the proposed global coverage targets.

(d) promote and support national capacity for high-quality research, innovation and development for the prevention and control of diabetes:

- Develop a plan for supporting national research in diabetes prevention and the control of diabetes and its complications.
- Support the prioritization of the research agenda for diabetes prevention and control and promote implementation research in order to assess the effectiveness of individual and population-wide interventions in preventing and controlling diabetes and obesity.

¹ Dialogue with the private sector on medicines and technologies for diabetes care, September 2021. Geneva: World Health Organization; 2021 (<https://www.who.int/news-room/events/detail/2021/09/01/default-calendar/dialogue-with-the-private-sector-on-medicines-and-technologies-for-diabetes-care>, accessed 1 December 2021).

² See document EB144/20.

- Support countries in developing diabetes-related research policies or plans that include community-based research and an evaluation of the impact of interventions and policies.

(e) Recommended actions to monitor the trends and determinants of diabetes and evaluate progress in their prevention and control:

- Continue monitoring NCD risk-factor dynamics and country capacity to prevent and control NCDs, including diabetes.
- Develop a monitoring framework and tool for monitoring the performance of health care systems by monitoring processes of care and outcomes at the level of health facilities.
- Support the development and maintenance of surveillance systems and promote the use of information and communications technology.

ANNEX 3

DRAFT GLOBAL STRATEGY ON ORAL HEALTH**BACKGROUND**

1. Recognizing the global public health importance of major oral diseases and conditions, in May 2021 the World Health Assembly adopted resolution WHA74.5 on oral health and requested the Director-General to develop, in consultation with Member States, a draft global strategy on tackling oral diseases. The strategy will inform the development of a global action plan on oral health, including a framework for tracking progress with clear measurable targets to be achieved by 2030.

2. The resolution on oral health and the resulting draft global strategy are grounded in the 2030 Agenda, in particular SDG Goal 3 (Ensure healthy lives and promote well-being for all at all ages) and SDG target 3.8 on achieving UHC. They are aligned with the WHO's Thirteenth General Programme of Work, 2019–2023; the political declaration of high-level meeting on universal health coverage adopted by the United Nations General Assembly in 2019; the Operational Framework for Primary Health Care of 2020; the Global Strategy on Human Resources for Health: Workforce 2030 of 2016; the NCD-GAP; the WHO Framework Convention on Tobacco Control adopted in 2003; resolution WHA74.16 on social determinants of health; decision WHA73(12) on the Decade of Healthy Ageing 2020–2030; and resolution WHA67.11 (2014) on public health impacts of exposure to mercury and mercury compounds: the role of WHO and ministries of public health in the implementation of the Minamata Convention.

GLOBAL OVERVIEW OF ORAL HEALTH

3. Oral health is the state of the mouth and teeth. It enables individuals to perform essential functions, such as eating, breathing and speaking, and encompasses psychosocial dimensions, such as self-confidence, well-being and the ability to socialize and work without pain, discomfort and embarrassment. Oral health varies over the life course from early life to old age, is integral to general health and supports individuals in participating in society and achieving their potential.

Oral disease burden

4. Globally, there are estimated to be more than 3.5 billion cases of oral diseases and other oral conditions, most of which are preventable.¹ For the last three decades, the combined global prevalence of dental caries (tooth decay), periodontal (gum) disease and tooth loss has remained unchanged at 45%, which is higher than the prevalence of any other NCD.

5. Cancers of the lip and oral cavity together represent the sixteenth most common cancer worldwide, with over 375 000 new cases and nearly 180 000 deaths in 2020.² Noma is a noncommunicable necrotizing disease that typically occurs in young children living in extreme poverty.

¹ Bernabe GE, Marcenes W, Hernandez CR, Bailey J, Abreu LG, Alipour V, et al. Global, Regional, and National Levels and Trends in Burden of Oral Conditions from 1990 to 2017: A Systematic Analysis for the Global Burden of Disease 2017 Study *J Dent Res.* 2020;99(4):362-373. doi: 10.1177/0022034520908533.

² Lip, oral cavity. International Agency for Research on Cancer fact sheet. Geneva: World Health Organization (<https://gco.iarc.fr/today/data/factsheets/cancers/1-Lip-oral-cavity-fact-sheet.pdf>, accessed 1 December 2021).

Noma starts as a lesion of the gums inside the mouth and destroys the soft and hard tissues of the mouth and face; it is fatal for as many as 90% of affected children.¹ Cleft lip and palate, the most common craniofacial birth defects, have a global prevalence of approximately 1 in 1500 births.^{2,3} Traumatic dental injury is estimated to have a global prevalence of 23% for primary teeth and 15% for permanent teeth, affecting more than 1 billion people.⁴

6. Oral diseases often have comorbidity with other NCDs. Evidence has shown an association between oral diseases, particularly periodontal disease, and a range of other NCDs, such as diabetes and cardiovascular disease.

Social, economic and environmental costs of poor oral health

7. The personal consequences of untreated oral diseases and conditions – including physical symptoms, functional limitations, stigmatization and detrimental impacts on emotional, economic and social well-being – are severe and can affect families, communities and the wider health care system. For those who obtain treatment for oral diseases and conditions, the costs can be high and can lead to significant economic burdens.

8. High out-of-pocket payments and catastrophic health expenditure associated with oral health care often lead people not to seek care when needed. Worldwide, in 2015 oral diseases and conditions accounted for an estimated US\$ 357 billion in direct costs (such as treatment expenditures) and US\$ 188 billion in indirect costs (such as productivity losses due to absence from work or school), with large differences between high-, middle- and low-income countries.⁵

9. There is a strong and consistent association between socioeconomic status (income, occupation and educational level) and the prevalence and severity of oral diseases and conditions.^{6,7} Across the life course, oral diseases and conditions disproportionately affect the poor and vulnerable members of societies, often including those who are on low incomes; people living with disability; older people living alone or in care homes; people who are refugees, in prison or living in remote and rural communities; and people from minority and/or other socially marginalized groups.

10. The environmental impact of the oral health care system is a great concern, as shown in the Minamata Convention on Mercury, a global treaty that obliges parties to implement measures to phase down the use of dental amalgam, which contains 50% mercury. Other environmental challenges related

¹ Information brochure for early detection and management of noma. World Health Organization. Regional Office for Africa. 2017.

² Birth defects surveillance. A manual for programme managers. Geneva: World Health Organization; 2020.

³ Salari N, Darvishi N, Heydari M, Bokae S, Darvishi F, Mohammadi M. Global prevalence of cleft palate, cleft lip and cleft palate and lip: A comprehensive systematic review and meta-analysis. *J Stomatol Oral Maxillofac Surg.* 2021;S2468-7855(21)00118X. doi:10.1016/j.jormas.2021.05.008.

⁴ Petti, S, Glendor U, Andersson L. World traumatic dental injury prevalence and incidence, a meta-analysis – One billion living people have had traumatic dental injuries. *Dent Traumatol.* 2018 Apr;34(2):71-86. doi: 10.1111/edt.12389.

⁵ Righolt AJ, Jevdjevic M, Marcenec W, Listl S. Global-, Regional-, and Country-Level Economic Impacts of Dental Diseases in 2015. *J Dent Res.* 2018;97(5):501-507. doi: 10.1177/0022034517750572.

⁶ Peres MA, Macpherson LMD, Weyant RJ, Daly D, Venturelli R, Mathur MR, et al. Oral diseases: a global public health challenge. *Lancet.* 2019;394(10194):249-260. doi: 10.1016/S0140-6736(19)31146-8.

⁷ Matsuyama Y, Jürges H, Listl S. The Causal Effect of Education on Tooth Loss: Evidence From United Kingdom Schooling Reforms. *Am J Epidemiol.* 2019;188(1):87-95. doi: 10.1093/aje/kwy205.

to oral health care include the use of natural resources, such as energy and water; the use of safe and environmentally sound dental material and oral care products; and sustainable waste management.

Social and commercial determinants and risk factors of oral health

11. Oral diseases and conditions and oral health inequalities are directly influenced by social and commercial determinants. The social determinants of oral health are the structural, social, economic and political drivers of oral diseases and conditions in society. The commercial determinants of oral health are the strategies used by some actors in the private sector to promote products and choices that are detrimental to health.

12. Oral diseases and conditions share risk factors common to the leading NCDs, that is, cardiovascular disease, cancer, chronic respiratory disease, diabetes and mental health conditions. These risk factors include both smoking and smokeless tobacco, harmful alcohol use, high sugars intake and lack of breastfeeding, as well as the human papillomavirus for oropharyngeal cancers.

13. Modifiable risk factors for cleft lip and palate include maternal active or passive tobacco smoking, while those for traumatic dental injury include alcohol use, traffic accidents and sports injuries. The aetiology of noma is unknown but its risk factors include malnutrition; coinfections; vaccine-preventable diseases; poor oral hygiene; and poor living conditions, such as deficiencies in water, sanitation and hygiene.

Oral health promotion and oral disease prevention

14. Only rarely have oral health promotion and oral disease prevention efforts targeted the social and commercial determinants of oral health at the population level. Moreover, oral health promotion and oral disease prevention are not typically integrated in other of NCD programmes that share major common risk factors and social determinants. In 2015, the WHO guideline on sugars intake for adults and children made the strong recommendation to reduce the intake of free sugars throughout the life course based on the evidence of direct associations between the intake of free sugars and body weight and dental caries. Nonetheless, public health initiatives to reduce sugar consumption are rare.

15. Initiatives that address upstream determinants can be cost-effective and have a high population reach and impact. Upstream strategies to reduce the intake of free sugars and the use of tobacco and alcohol include policies, taxes and/or regulation of the price, sale and advertisement of unhealthy products. Midstream policy interventions include creating more supportive conditions in key settings, such as educational settings, schools, workplaces and care homes.

16. Millions of people do not have access to oral health promotion and oral disease prevention programmes.¹ The use of fluorides for the prevention of dental caries is limited. Frequently, essential prevention methods, such as fluoridation of the water supply and other community-based methods, topical fluoride applications or the use of quality, fluoride toothpaste, are not available or affordable.

¹ Petersen PE, Baez RJ, Ogawa H. Global application of oral disease prevention and health promotion as measured 10 years after the 2007 World Health Assembly statement on oral health. *Community Dent Oral Epidemiol.* 2020;48:338–348. doi: <https://doi.org/10.1111/cdoe.12538>.

Oral health care systems

17. Political commitment and resources for oral health care systems often are limited at the ministry of health level. Typically, the oral health care system is inadequately funded, delivered by independent private providers, highly specialized and isolated from the broader health care system. In most countries, UHC benefit packages and NCD interventions do not include essential oral health care.

18. Essential oral health care covers a defined set of safe, cost-effective interventions at the individual and community levels to promote oral health, as well as to prevent and treat the most prevalent and/or severe oral diseases and conditions, including appropriate rehabilitative services and referral. Oral health care is not usually covered in primary care facilities and the private and/or public insurance scheme coverage of oral health is highly variable within and between countries.

19. In many countries, insufficient attention is given to planning the health workforce to address the population's oral health needs. Oral health training is rarely integrated in general health education systems. Typically, training focuses on educating highly specialized dentists rather than mid-level and community oral health workers or optimizing the roles of the wider health team.

20. The COVID-19 pandemic has had a negative impact on public health programmes and the provision of essential oral health care in most countries, leading to delays in oral health care treatment, increased use of antibiotic prescriptions and greater oral health inequalities. The pandemic should be seen as an opportunity to strengthen the integration of oral health care into general health care systems as part of UHC efforts.

VISION, GOAL AND GUIDING PRINCIPLES

Vision

21. The vision of this strategy is UHC for oral health for all individuals and communities by 2030, enabling them to enjoy the highest attainable state of oral health and contributing to healthy and productive lives.

22. UHC means that all individuals and communities have access to essential, quality health services that respond to their needs and that they can use without suffering financial hardship. These services include oral health promotion and prevention, treatment and rehabilitation interventions related to oral diseases and conditions across the life course. In addition, upstream interventions are needed to strengthen the prevention of oral diseases and reduce oral health inequalities. Achieving the highest attainable standard of oral health is a fundamental right of every human being.

Goal

23. The goal of the strategy is to guide Member States to: (a) develop ambitious national responses to promote oral health; (b) reduce oral diseases, other oral conditions and oral health inequalities; (c) strengthen efforts to address oral diseases and conditions as part of UHC; and (d) consider the development of targets and indicators, based on national and subnational contexts, building on the guidance to be provided by WHO's global action plan on oral health, in order to prioritize efforts and assess the progress made by 2030.

Guiding principles

Principle 1: A public health approach to oral health

24. A public health approach to oral health strives to provide the maximum oral health benefit for the largest number of people by targeting the most prevalent and/or severe oral diseases and conditions. To achieve this, oral health programmes should be integrated in broader and coordinated public health efforts. A public health approach to oral health requires intensified and expanded upstream actions on the social and commercial determinants of oral health, involving a broad range of stakeholders from social, economic, education, environment and other relevant sectors.

Principle 2: Integration of oral health in PHC

25. PHC is the cornerstone of strengthening health systems because it improves the performance of health systems, resulting in better health outcomes. The integration of essential oral health care in other NCD services in PHC is an essential component of UHC. Such integration has many potential benefits, including increased chance of prevention, early detection and control of related conditions and comorbidities, as well as more equitable access to comprehensive, quality health care.

Principle 3: Innovative workforce models to respond to population needs for oral health

26. Resource and workforce planning models need to better align the education and training of health workers with public health goals and population oral health needs, particularly for underserved populations. UHC can only be achieved by reforming health, education and resource planning systems to ensure the health workforce has the needed competencies to provide essential oral health care services across the continuum of care. This may require reassessing the roles and responsibilities of mid-level and community-based health workers and other relevant health professionals that include the oral health sector. The new WHO Global Competency Framework for Universal Health Coverage should guide the development of health workforce models for oral health.

Principle 4: People-centred oral health care

27. People-centred care for oral health consciously seeks and engages the perspectives of individuals, families and communities, including people affected by poor oral health. In this approach, people are seen as participants as well as beneficiaries of trusted health systems that respond to their needs and preferences in humane and holistic ways. People-centred care actively fosters a more holistic approach to needs assessment, shared decision-making, oral health literacy and self-management. Through this process, people develop the opportunity, skills and resources to be articulate, engaged and empowered users and stakeholders of oral health services.

Principle 5: Tailored oral health interventions across the life course

28. People are affected by oral diseases and conditions – and their risk factors and social and commercial determinants – from early life to old age. The effects may vary and accumulate over time and have complex consequences in later life, particularly in relation to other NCDs. Tailored, age-appropriate oral health strategies that include essential oral health care need to be integrated in relevant health programmes across the life course, including prenatal, infant, child, adolescent, working

adult and older adult programmes. These may include age-appropriate, evidence-based interventions that are focused on promoting healthier eating, tobacco cessation, alcohol reduction and self-care.

Principle 6: Optimizing digital technologies for oral health

29. Artificial intelligence (AI), mobile devices and other digital technologies can be used strategically for oral health at different levels, including for improving oral health literacy, implementing oral health e-training and provider-to-provider telehealth, as well as for increasing early detection, surveillance and referral for oral diseases and conditions within primary care. In parallel, it is critical to establish and/or reinforce governance for digital health and to define norms and standards for digital oral health based on best practice and scientific evidence.

STRATEGIC OBJECTIVES

Strategic objective 1: Oral health governance – Improve political and resource commitment to oral health, strengthen leadership and create win-win partnerships within and outside the health sector

30. Strategic objective 1 seeks the recognition and integration of oral health in all relevant policies and public health programmes as part of the broader national NCD and UHC agendas. Increased political and resource commitment to oral health are vital at the national and subnational levels, as is the reform of health and education systems. Ideally, this would include a guaranteed minimum share of public health expenditure that is directed exclusively to national oral health programmes.

31. Central to this process is establishing or strengthening the capacity of a national oral health unit with professionals trained in public health. A dedicated, qualified, functional, well-resourced and accountable oral health unit should be established or reinforced within NCD structures and other relevant public health and education services.

32. Sustainable partnerships within and outside the health sector, as well as engagement with communities, civil society and the private sector, are essential to mobilize resources, target the social and commercial determinants of oral health and implement reforms. For example, collaboration between the ministry of health and the ministry of environment is critical to address environmental sustainability within oral health care, such as the implementation of the Minamata Convention on Mercury and challenges related to the management of chemicals and waste (including mercury).

Strategic objective 2: Oral health promotion and oral disease prevention – Enable all people to achieve the best possible oral health and address the social and commercial determinants and risk factors of oral diseases and conditions

33. Strategic objective 2 calls for evidence-based, cost-effective and sustainable interventions to promote oral health and prevent oral diseases and conditions. At the downstream level, oral health education supports the development of personal, social and political skills that enable all people to achieve their full potential for oral health self-care. At the upstream level, oral health promotion includes creating public policies and fostering community action to improve people's control over their oral health and to promote oral health equity.

34. Prevention efforts target key risk factors and the social and commercial determinants of oral diseases and other oral conditions. These initiatives should be fully integrated and mutually reinforcing

with other relevant NCD prevention strategies and regulatory policies related to tobacco use, harmful alcohol use and limiting free sugars intake to less than 10% of total energy and ideally to less than 5%. Prevention efforts should also include safe and cost-effective community-based methods to prevent dental caries, such as fluoridation of the water supply where appropriate, topical fluoride application and the use of quality, fluoride toothpaste.

Strategic objective 3: Health workforce: Develop innovative workforce models and revise and expand competency-based education to respond to population oral health needs

35. Strategic objective 3 aims to ensure that there is an adequate number, availability and distribution of skilled health workers to deliver an essential package of oral health services to meet population needs. This requires that the planning and prioritization of oral health services be explicitly included in all costed health workforce strategies and investment plans.

36. More effective workforce models will likely involve a new mix of dentists, mid-level oral health care providers (such as dental assistants, dental nurses, dental prosthetists, dental therapists and dental hygienists), community-based health workers and other relevant health professionals who have not traditionally been involved in oral health care, such as primary care physicians and nurses. Implementing such models may require reassessing and updating national legislative and regulatory policies for the licensing and accreditation of the health workforce. Health educators will be key stakeholders in establishing competency and professionalism standards for oral health to guide and assess the education, training and practice of an innovative health workforce.

37. Curricula and training programmes need to adequately prepare health workers to manage and respond to the public health aspects of oral health and address the environmental impact of oral health services on planetary health. Professional oral health education must go beyond development of a clinical skill set to include robust training in health promotion and disease prevention and key competencies, such as evidence-informed decision-making, reflective learning about the quality of oral health care, inter-professional communication and the provision of people-centred health care. Intra- and inter-professional education and collaborative practice will also be important to allow the full integration of oral health services in health systems and at the primary care level.

Strategic objective 4: Oral health care – Integrate essential oral health care and ensure related financial protection and essential supplies in PHC

38. Strategic objective 4 seeks to increase access by the entire population to safe, effective and affordable essential oral health care as part of the UHC benefit package. Health workers who provide oral health services should be active members of the PHC team and work collaboratively, including across other levels of care, to tackle oral diseases and conditions as well as other NCDs, with a focus on addressing common risk factors and supporting general health consultations.

39. Financial protection through expanded private and public insurance policies and programmes, including coverage of oral health services, is one of the cornerstones of UHC. Ensuring the reliable availability and distribution of essential medical consumables, generic medicines and other dental supplies is also important for the management of oral diseases and conditions in PHC and referral services.

40. Digital health technology should be examined for its potential role in the delivery of accessible and effective essential oral health care. This might include the development of policy, legislation and infrastructure to expand the use of digital health technologies, such as mobile phones, intra-oral cameras

and other digital technologies, to support remote access and consultation for early detection and referral to services for the management of oral diseases and conditions.

Strategic objective 5: Oral health information systems – Enhance surveillance and information systems to provide timely and relevant feedback on oral health to decision-makers for evidence-based policy-making

41. Strategic objective 5 involves developing more efficient, effective and inclusive integrated information systems on oral health to inform planning, management and policy-making. At the national and subnational levels, strengthening information systems should include the systematic collection of data on oral health status, social and commercial determinants, risk factors, workforce, oral health services readiness and resource spending.

42. These improved systems can use routine health information systems, demographic and health surveys and promising digital technologies and should ensure protection of patient data. They should also be established to monitor patterns and trends in oral health inequalities and track the implementation and impact of existing policies and programmes related to oral health.

43. New oral health epidemiological methods, including high-resolution video, multispectral imaging and mobile technologies, have the potential to improve the quality of population-based oral health data while reducing costs and complexity. WHO's new mobile technologies for oral health implementation guide, for example, provides guidance on using mobile technologies for population-based and health service delivery surveillance.

Strategic objective 6: Oral health research agendas – Create and continuously update context and needs-specific research that is focused on the public health aspects of oral health

44. Strategic objective 6 strives to create and implement new oral health research agendas that are oriented towards public health programmes and population-based interventions. These should include research on learning health systems, implementation sciences, workforce models, digital technologies and the public health aspects of oral diseases and conditions.

45. Other research priorities include upstream interventions; PHC interventions; mercury-free dental restorative materials; barriers to access to oral health care; oral health inequalities; oral health promotion in key settings such as schools; environmentally sustainable practices; and economic analyses to identify cost-effective interventions.

46. The translation of research findings into practice is equally important and should include the development of regionally specific, evidence-informed clinical practice guidelines. Researchers have an important role in supporting the development and evaluation of population oral health policies and evaluating and applying the evidence generated by new public health interventions.

ROLE OF WHO, MEMBER STATES AND PARTNERS

WHO

47. WHO will provide a leadership and coordination role in promoting and monitoring global action on oral health, including in relation to the work of other relevant United Nations agencies, development

banks and other regional and international organizations. It will set the general direction and priorities for global oral health advocacy, partnerships and networking; articulate evidence-based policy options; and provide Member States with technical and strategic support.

48. WHO will continue its work with global public health partners, including WHO collaborating centres, to establish networks for building capacity in oral health care, research and training; mobilize contributions from nongovernmental organizations and civil society; and facilitate the collaborative implementation of the strategy, particularly with respect to the needs of low- and middle-income countries. WHO will also collaborate with Member States to ensure that there is uptake and accountability for the strategy at the national level, particularly in national health policies and strategic plans.

49. By 2023, WHO will translate this strategy into an action plan for public oral health, including a monitoring framework for tracking progress with clear measurable targets to be achieved by 2030. By 2024, WHO will recommend cost-effective, evidence-based oral health interventions as part of the updated Appendix 3 to the NCD-GAP and the WHO UHC Compendium.

50. WHO will continue to update technical guidance to ensure safe and uninterrupted dental care, including during and after the COVID-19 pandemic and other health emergencies. In collaboration with the United Nations Environment Programme (UNEP), WHO will develop technical guidance on environmentally sustainable oral health care, including mercury-free products and less invasive procedures. WHO will also consider the classification of noma within the road map for neglected tropical diseases 2021–2030.

51. WHO will help scale up and sustain innovations for oral health impact in accordance with the WHO innovation scaling framework, including social, service delivery, health product, business model, digital and financial innovations.

52. WHO will create an oral health data platform as part of its data repository for health-related statistics. WHO will strengthen integrated oral health information systems and surveillance activities through the development of new standardized data-gathering technologies and methods, as well as oral health indicators for population health surveys. WHO will promote and support research in priority areas in order to improve oral health programme implementation, monitoring and evaluation.

Member States

53. Member States have the primary role in responding to the challenge of oral diseases and conditions in their populations. Governments are responsible for engaging all sectors of society to generate effective responses for the prevention and control of oral diseases and conditions, the promotion of oral health and the reduction of oral health inequalities. They should secure appropriate oral health budgets based on intervention costing and investment cases to achieve universal oral health coverage.

54. Member States should ensure that oral health is a solid, robust and integral part of national and subnational health policies and that national oral health units have sufficient capacity and resources to provide strong leadership, coordination and accountability on oral health.

55. Member States can strengthen oral health care system capacities by integrating oral health in PHC as a part of UHC benefit packages; ensuring the affordability of essential oral health medicines and

consumables, as well as other equipment or supplies for the prevention and management of oral diseases and conditions; and prioritizing environmentally sustainable and less invasive oral health care.

56. Member States should also assess and reorient the health workforce as required to meet population oral health needs by reorienting the outcomes of the education programmes to the oral health services to be provided. This requires enabling inter-professional education and collaborative practice that involves mid-level and community-based health workers. They should critically review and continuously update their oral health education content across health worker training programmes and training curricula, prioritizing a public health approach to oral health that enables health workers to develop essential competencies such as reflective problem-solving and leadership skills.

57. Member States can address the determinants of oral health and the risk factors of oral diseases and conditions by advocating for evidence-based regulatory measures that address the underlying determinants that increase or reduce risks and working with commercial entities to encourage them to reformulate products to reduce sugar levels, reduce portion sizes or shift consumer purchasing towards products with lower sugar content. Member States can also target determinants by strengthening health-promoting conditions in key settings; implementing community-based methods to prevent dental caries; supporting legislation to increase the affordability of quality, fluoride toothpaste; and advocating for its recognition as an essential health product within the national list of essential medicines.

58. Member States should improve oral health surveillance, data collection and monitoring to inform decision-making and advocacy. This includes developing and standardizing updated methods and technologies for gathering oral health epidemiological data, integrating electronic dental and medical records and strengthening the integrated surveillance of oral diseases and conditions. It also includes the analysis of oral health system and policy data, operational research and the evaluation of oral health interventions and programmes.

International partners

59. UNICEF, UNEP, the International Telecommunication Union and other United Nations agencies, as well as development banks and other international partners, have valuable roles to play in achieving the goals and objectives of the strategy at global, regional and national levels. This includes taking initiative in advocacy, resource mobilization, exchange of information, sharing of lessons learned, capacity-building, research and developing targets and indicators for streamlined global collaboration.

60. Coordination is needed among international partners, including the organizations of the United Nations system, intergovernmental bodies, non-State actors, nongovernmental organizations, professional associations, youth and student organizations, patients' groups, academia and research institutions. Establishing and working efficiently as an international coalition on oral health will better support countries in their implementation of the strategy.

Civil society

61. Civil society is a key stakeholder in setting priorities for oral health care services and public health. It has a role to play in encouraging governments to develop ambitious national and subnational oral health responses and contributing to their implementation. Civil society can forge multistakeholder partnerships and alliances that mobilize and share knowledge, assess progress, provide services and amplify the voices of people living with and affected by oral diseases and conditions. Actively engaging in meaningful partnership with civil and community organizations, as well as

co-designing/co-producing innovative approaches to oral health care, provide an opportunity to develop more responsive and sustainable models of care.

62. Civil society can support consumers and lead grass-roots mobilization and advocacy for increased focus in the public agenda on oral health promotion and the prevention and control of oral diseases and conditions. Civil society and consumers can advocate with governments and industries to demand that the food and beverage industry provide healthy products; support governments in implementing their tobacco control programmes; and form networks and action groups to promote the availability of food and beverages that are low in free sugars and of quality, fluoride toothpaste, including through subsidization or reduced taxes.

Private sector

63. The private sector can strengthen its commitment and contribution to national and subnational oral health responses by implementing occupational oral health measures, including through good corporate practices, workplace wellness programmes and health insurance plans.

64. The private sector should take concrete steps towards reducing the marketing, advertising and sale of products that cause oral diseases and conditions, such as tobacco products and food and beverages that are high in free sugars. Increased private sector transparency and accountability is a key component of such actions.

65. The private sector should strive to improve the access to and affordability of safe, effective and quality dental equipment and devices and oral hygiene products. It should accelerate research on affordable, safe and environmentally sound equipment and materials for oral health care.

66. National dental associations and other oral health professionals organizations have a responsibility to support the oral health of their communities. They can collaborate with and support national and subnational governments in implementing the strategy through the provision of essential oral health care, including by helping to plan and implement population-wide prevention measures and by participating in oral health data collection and surveillance.

ANNEX 4

RECOMMENDATIONS ON HOW TO STRENGTHEN THE DESIGN AND IMPLEMENTATION OF POLICIES, INCLUDING THOSE FOR RESILIENT HEALTH SYSTEMS AND HEALTH SERVICES AND INFRASTRUCTURE, TO TREAT PEOPLE LIVING WITH NONCOMMUNICABLE DISEASES AND TO PREVENT AND CONTROL THEIR RISK FACTORS IN HUMANITARIAN EMERGENCIES

1. Paragraphs 31, 46 and 48 of the NCD-GAP call for ensuring the continuity of essential NCD services, including the availability of life-saving technologies and essential medicines, in humanitarian emergencies. Also, in paragraph 40 of United Nations General Assembly resolution 73/2, Member States reaffirmed their commitment to “strengthen the design and implementation of policies, including for resilient health systems and health services and infrastructure to treat people living with NCDs and prevent and control their risk factors in humanitarian emergencies, including before, during and after natural disasters, with a particular focus on countries most vulnerable to the impact of climate change and extreme weather events”.
2. To provide initial guidance to Member States, the Secretariat submitted Annex 9 of document EB148/7, which describes the process the Secretariat is following to support Member States in their commitment to strengthen policies to treat people living with NCDs and prevent and control their risk factors in humanitarian emergencies.
3. Building on this initial guidance, this annex suggests recommendations for Member States, international partners and WHO to ensure essential service provision for people living with NCDs in humanitarian emergencies by investing in and building longer-term NCD emergency preparedness and responses during the COVID-19 pandemic and beyond, as part of “build back better” through a multisectoral all-hazards approach.

CHALLENGES AND OPPORTUNITIES

THE COVID-19 PANDEMIC: A PERSISTING DEADLY INTERPLAY WITH THE NCD EPIDEMIC

4. In December 2020, the United Nations General Assembly adopted resolution 75/130, “noting with concern that non-communicable diseases, notably cardiovascular diseases, cancers, diabetes, chronic respiratory diseases, as well as mental disorders, other mental health conditions and neurological disorders, are the leading causes of premature death and disability globally, including in low- and middle-income countries, and that people living with non-communicable diseases are more susceptible to the risk of developing severe COVID-19 symptoms and are among the most affected by the pandemic, and recognizing that necessary prevention and control efforts are hampered by, inter alia, lack of universal access to quality, safe, effective, affordable essential health services, medicines, diagnostics and health technologies, as well as a global shortage of qualified health workers”.
5. Lack of functioning civil registration and vital statistics systems as well as different processes to test and report COVID-19 deaths make it difficult to account for accurate, complete and timely data on causes of deaths and comorbidities, including from COVID among people living with or at risk of NCDs.

6. The virus and the pandemic affect people living with or at risk of NCDs through different pathways, including:

- (a) a higher susceptibility to COVID-19 infection and higher severity and case fatality rates among people with NCDs;
- (b) delays in diagnosis of NCDs, resulting in more advanced disease stages;
- (c) delayed, incomplete or interrupted therapy of NCDs; and
- (d) increases in behavioural risk factors for NCDs, such as physical inactivity, increased harmful use of alcohol, tobacco use and unhealthy diets.

7. COVID-19 has disproportionately impacted people living with or at risk of NCDs, including economically disadvantaged groups such as migrant workers, older adults, as well as forcibly displaced and refugee populations in humanitarian contexts. Therefore, the pandemic magnified and further drew attention to persistent inequalities in both health outcomes and health determinants, including NCD risk factors, social determinants and access to health services, both within and across countries. Working long-term and recognizing how COVID-19 and NCDs are syndemically interlocked conditions^{1,2} may be the first step towards developing the nuanced approaches that are needed to more comprehensively protect society's vulnerable populations.

8. Disruptions of essential NCD health services due to COVID-19 have been widespread due to the shortage of medicines, staff, diagnostics and public transport services among other constraints. The rapid assessment survey of the impact of the COVID-19 pandemic on NCD resources and services,³ conducted by WHO's NCD Department in May 2020 and to which 163 Member States (84%) responded, reported widespread complete or partial disruptions to a range of NCD services across countries. Some 59% of countries reported that access to outpatient essential NCD services were restricted to some degree, while 35% reported that inpatient NCD services were open for emergencies only. About half of countries reported complete or partial disruptions to hypertension management services (53%) or to diabetes and diabetic complication management services (49%). In terms of disruption of activities, 77% of countries reported some disruption to ministry of health NCD activities planned for 2020, such as screening

¹ Horton, R. Offline: COVID-19 is not a pandemic. *Lancet*. 2020;396(10255):874. doi: 10.1016/S0140-6736(20)32000-6.

² Nassereddine, G, Habli, S, Slama, S, Sen, K, Rizk, A, Sibai, AM. COVID-19 and noncommunicable diseases in the Eastern Mediterranean Region: the need for a syndemics approach to data reporting and health care delivery. *BMJ Glob Health*. 2021;6(6):e006189. doi: 10.1136/bmjgh-2021-006189.

³ The impact of the COVID-19 pandemic on noncommunicable disease resources and services: results of a rapid assessment. Geneva: World Health Organization; 2020.

programmes, awareness campaigns, population-based surveys (STEPS)¹ or training courses and implementation of WHO technical packages² such as WHO/PEN³ and WHO/HEARTS.⁴

9. The COVID-19 pandemic increased also rehabilitation needs in those who were affected by the virus with an anticipated secondary surge in needs as the pandemic settles, due to the disruption of routine health and rehabilitation services, as well as the potential long-term impacts and sequelae among people living with NCDs and other people infected by the virus.

10. The subsequent two rounds of WHO-wide surveys assessing the continuity of essential health services during the COVID-19 pandemic (pulse surveys) revealed less severe but persistent disruption of services, including for NCDs.⁵ Almost two years after the pandemic started, WHO's NCD Department has also invited countries to fill a COVID-19 related module as part of the periodic assessment of national capacity for NCD prevention and control that will be published later this year.

11. The lack of understanding and attention given to the interplay between the virus and NCDs in the early stages of the COVID-19 pandemic hampered the inclusion of NCDs in country strategic preparedness and response plans (CSPRPs). A review of 87 plans and 121 documents through an NCD lens, which was conducted by WHO in October 2020, revealed that only 33 countries included NCDs as part of the essential health services to be maintained during the pandemic, only 16 countries included the management of NCDs and only 3 countries had a specific budget line for NCDs. Deeply concerned about this blind spot, the United Nations General Assembly, in resolution 74/306, called upon Member States "to further strengthen efforts to address noncommunicable diseases as part of universal health coverage, recognizing that people living with noncommunicable diseases are at a higher risk of developing severe COVID-19 symptoms and are among the most impacted by the pandemic". Similarly, in resolution 75/130, entitled "Global health and foreign policy: strengthening health system resilience through affordable health care for all", adopted in December 2020, the General Assembly noted with concern the severe impact COVID-19 on people living with NCDs, stressing the importance of monitoring the indirect impacts of the COVID-19 pandemic on integrated service delivery as well as maintaining the essential part of health care delivery and global supply chains, including for NCDs, and called for governments to reaffirm their commitments made under the political declaration of the third high-level meeting of the United Nations General Assembly on the prevention and control of NCDs to accelerate the implementation of national NCDs responses as part of the 2030 Agenda.

12. To support countries in mitigating the disruption of essential health services, WHO released in March 2020 and subsequently updated an operational guidance on maintaining essential services during the outbreak, outlining basic principles and practical recommendations that support decision-making to ensure the continuity of selected essential health services, highlighting key actions that countries should

¹STEPwise Approach to NCD Risk Factor Surveillance (STEPS). Geneva: World Health Organization (<https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/steps>, accessed 1 December 2021).

² Noncommunicable diseases: About us. Geneva: World Health Organization (<https://www.who.int/teams/noncommunicable-diseases/about>, accessed 1 December 2021).

³ WHO package of essential noncommunicable (PEN) disease interventions for primary health care. Geneva: World Health Organization ([https://www.who.int/publications/i/item/who-package-of-essential-noncommunicable-\(pen\)-disease-interventions-for-primary-health-care](https://www.who.int/publications/i/item/who-package-of-essential-noncommunicable-(pen)-disease-interventions-for-primary-health-care), accessed 1 December 2021).

⁴ HEARTS Technical Package. Geneva: World Health Organization (<https://www.who.int/publications/i/item/heart-technical-package>, accessed 1 December 2021).

⁵ Second round of the national pulse survey on continuity of essential health services during the COVID-19 pandemic January–March 2021. Geneva: World Health Organization; 2021.

consider, including for NCDs. Another guidance was issued in January 2021 to support countries in analysing and using routine data to monitor the effects of COVID-19 on essential health services.¹

13. WHO's NCD Department contributed to this normative work through the development of scientific briefs summarizing the latest evidence for the susceptibility and/or negative impact on outcomes for COVID-19 from the presence of specific NCDs, as well as the development of modelling studies with policy scenarios to model possible service delivery model changes, the economic parameters associated with these and the mid-term and long-term health impacts, including on meeting SDG target 3.4. The work was complemented by numerous case studies documenting how countries mitigated the disruptions to NCD-related services, including through innovative digital health solutions (such as the use of mobile health technologies to support people living with NCDs or the use of telemedicine to ensure continuity of care).²

14. As the world engages in a new phase of the pandemic, rolling out COVID-19 vaccines in the attempt to control the pandemic, the review of the situation of NCDs during the pandemic has demonstrated that NCD preparedness and response must be part of any pandemic response and preparedness at global, regional and national levels. Recovery and building back better needs to go together with action to address NCDs. The prevention, screening, early diagnosis and treatment of hypertension, diabetes, cancer and other NCDs cannot be postponed because the NCD epidemic is not on hold. Addressing NCDs and COVID-19 simultaneously and at sufficient scale requires a response stronger than any seen before to safeguard lives and livelihoods. Furthermore, the lessons learned from the COVID-19 pandemic offer opportunities for strengthening emergency preparedness and responses beyond pandemic ones.

15. Beyond the COVID-19 pandemic, WHO was, as at 8 December 2021, aware of and responding to 73 active emergencies graded according to the WHO Emergency Response Framework.

FROM COVID-19 TO AN ALL-HAZARDS EMERGENCY PREPAREDNESS AND RESPONSE APPROACH FOR NCDs

16. The number of people currently affected by humanitarian emergencies worldwide is unprecedented. The United Nations Office for the Coordination of Humanitarian Affairs has estimated that 235 million people will need humanitarian assistance and protection in 2021. Responding to these emergencies, the United Nations and partner organizations aim to assist 160 million people most in need across 56 countries and will require a total of US\$ 35 billion to do so.³ As a result of climate change, population growth, unplanned urbanization, food insecurity and massive movements of people, emergencies have become more and more complex, protracted and interlinked.

17. While the COVID-19 pandemic has shifted the attention to pandemic emergency preparedness and responses, the nature and frequency of emergencies require the global health community to adopt a broader approach, in which all types of hazards are assessed, anticipated and better responded to. The special session of the World Health Assembly to be held later this year to consider developing a WHO convention, agreement or other international instrument on pandemic preparedness and response offers a unique opportunity to better address the need of people living with NCDs in humanitarian

¹ Analysing and using routine data to monitor the effects of COVID-19 on essential health services: practical guide for national and subnational decision-makers. Geneva: World Health Organization; 2021.

² The impact of the COVID-19 pandemic on noncommunicable disease resources and services: results of a rapid assessment. Geneva: World Health Organization; 2020.

³ Global Humanitarian Overview 2021. United Nations Office for the Coordination of Humanitarian Affairs; 2021.

emergencies and contribute to assignment under resolution WHA74/7 to strengthen country, international partners and WHO preparedness for and response to health emergencies, through a multisectoral, all-hazards approach.¹

LESSONS LEARNED AND OPPORTUNITIES

18. Due to population growth and ageing, among other factors, the NCD burden among populations affected by natural and man-made disasters is growing and will further require better inclusion of an NCD component in emergency preparedness and responses. The decade of protracted conflicts in the Middle East, the evolving health profile and the identified needs of forcibly displaced populations from Afghanistan, Ethiopia, Myanmar, South Sudan or the Bolivarian Republic of Venezuela provide strong evidence for the need to strengthen the NCD component of emergency preparedness and responses. The experience gained by WHO and humanitarian partners in providing technical assistance in countries in emergencies should be further analysed and capitalized on.

19. The following developments represent opportunities for the global health community to establish a better response for the people living with NCDs as part of emergency preparedness and responses.

(a) The current pandemic triggered renewed attention to the specific considerations of planning and maintaining essential health services, including in humanitarian settings.^{2,3,4} Managing COVID-19 epidemics in fragile states and crisis-affected populations presents a challenge for countries and humanitarian actors, with huge competing population needs and limited resources, if essential health services are unable to be safely delivered or accessed and if the pre-crisis services to be maintained, adapted or suspended are not prioritized and/or widely made available and subsidized as part of national benefit health packages.

(b) Complementing WHO interim guidance on essential health services during an outbreak, the WHO Global Health Cluster COVID-19 Taskforce developed a guidance note on how to prioritize and plan essential health services during COVID-19 response in humanitarian settings.⁵ More recently, efforts are under way under the Task Force and the WHO Emergency Programme to define a minimum set of evidence-based services (package of high-priority health services in humanitarian settings) that are relevant and operationally feasible for humanitarian settings for health clusters and health cluster partners to promote, use and progressively guarantee. Informed by existing reference packages from fragile and conflict-affected cluster settings, the anticipated high-priority health services package will draw on recommended interventions and actions developed under the WHO UHC Compendium.

¹ See document A74/A/CONF./2.

² Blanchet K, Alwan A, Antoine C, Cros MJ, Feroz, F, Guracha TA, et al. Protecting essential health services in low-income and middle-income countries and humanitarian settings while responding to the COVID-19 pandemic. *MJ Glob Health*. 2020;5(10):e003675. doi: 10.1136/bmjgh-2020-003675.

³ Singh L, Singh NS, Maldonado BN, Tweed S, Blanchet K, Graham WJ. What does “leave no one behind” mean for humanitarian crises-affected populations in the COVID-19 pandemic? *BMJ Glob Health*. 2020; 5(4): e002540. doi: 10.1136/bmjgh-2020-002540.

⁴ Garry S, Abdelmagid N, Baxter L, Roberts N, de Waroux OLP, Ismail S, et al. Considerations for planning COVID-19 treatment services in humanitarian responses. *Confl Health*. 2020;14(1):80. doi:10.1186/s13031-020-00325-6.

⁵ Essential Health Services: A guidance note. How to prioritize and plan essential health services during COVID-19 response in humanitarian settings. Geneva: World Health Organization; 2020.

(c) The development and deployment of the WHO NCD kit since 2017 in more than 20 countries and humanitarian hubs worldwide, including during the COVID-19 pandemic,¹ contributed to addressing part of the unmet needs for NCD essential medicines and supplies during emergencies. With more than 7500 kit modules procured since 2017, at an annual value of US\$ 3.6 million, the NCD kit has filled a critical gap, becoming one of the most procured WHO standard emergency health kits. Recent reviews of the experience gained in using the NCD kit informed its 2021 revision, also highlighting actions to be taken to improve its planning and distribution, as well as the support to be provided to build the capacity of humanitarian and primary care responders.

(d) Attention to NCDs in humanitarian settings, as well as coordination among United Nations agencies, humanitarian responders and donors, is growing and improving. The Informal Interagency Working Group on NCDs in Humanitarian Settings, the WHO Global Health Cluster and the International Alliance for Diabetes Action² not only provide platforms for the exchanges of information and practices but increasingly contribute to the co-creation of solutions to improve NCD management in practice.

(e) Crises/affected populations such as forcibly displaced people and refugees can provide critical reflections on how emergencies impact their lives and help shape the design of policies and service delivery programmes that are meant to address their needs. The Apart Together survey of refugees' and migrants' self-reported impact of COVID-19 or the series of consultations organized by regional chapters of the NCD Alliance, such as the "Voices of People Living with NCDs in Humanitarian Crises",³ represent positive examples of inclusiveness, complementing the efforts of WHO and civil society partners in advocating for the meaningful engagement of people with NCDs.

(f) Research outputs on NCDs and COVID-19 and more broadly on NCDs in humanitarian settings are increasing in scope and quality, providing a stronger evidence basis to inform the design of policies and programmes. Drawing on descriptive epidemiological studies reporting on the burden of NCD among COVID-19 or other crisis-affected population, a much greater emphasis has been placed on access to NCD services and models of care for NCD adapted to humanitarian settings.⁴ Several initiatives and platforms have recently been launched, complementing WHO's efforts in shaping the research agenda.⁵

¹ WHO Provides NCD Kits to Timor-Leste to Prevent Risk of Comorbidity Amidst COVID-19 Pandemic. Press release. Geneva: World Health Organization (<https://www.who.int/southeastasia/news/feature-stories/detail/who-provides-ncd-kits-to-timor-leste-to-prevent-risk-to-comorbidity-amidst-covid-19-pandemic>, accessed 1 December 2021).

² See International Alliance for Diabetes Action website (<https://www.iadadiabetes.org/>).

³ Amplifying voices and perspectives of people living with NCDs in the Eastern Mediterranean Region. NCD Alliance; 2020 (<https://ncdalliance.org/news-events/news/amplifying-voices-and-perspectives-of-people-living-with-ncds-in-the-eastern-mediterranean-region>, accessed 1 December 2021).

⁴ Jaung MS, Willis R, Sharma P, Aebischer Perone S, Frederiksen S, Truppa C, et al. Models of care for patients with hypertension and diabetes in humanitarian crises: a systematic review. *Health Policy Plan.* 2021;36(4):509-532. doi: 10.1093/heapol/czab007.

⁵ NCDs in Humanitarian Settings. A knowledge hub presenting the key resources around NCDs in humanitarian settings accessibly in one place. London School of Hygiene and Tropical Medicine (<https://www.lshtm.ac.uk/research/centres-projects-groups/humanitarian-ncd>, accessed 1 December 2021).

RECOMMENDATIONS

20. Recommended actions for **Member States**:

(a) COVID-19 related:

- integrate and strengthen policies, programmes and services to treat people living with NCDs and prevent and control their risk factors into country COVID-19 response and recovery plans, in line with United Nations comprehensive plans;
- collect and use data to assess the impact of COVID-19 on people living with NCDs and monitor the impact of the pandemic on NCD services disruption, morbidity and mortality;
- maintain, restore and scale up prevention, early diagnosis and care for people living with or at high risk of NCDs as soon as feasible and ensure that they are protected from exposure to COVID-19 and considered in health and social protection;
- mobilize and use COVID-19 and other emergency funding to support the provision and continuity of essential services, ensuring access to essential, safe, affordable, quality and effective NCD medicines and supplies, including for the prevention and control of NCDs and their modifiable risk factors;
- ensure the meaningful engagement of civil society, health professionals and people living with NCDs in the planning, implementation and evaluation of national COVID-19 preparedness and response plans;
- prioritize people living with NCDs in national deployment and vaccination roll-outs for COVID-19 vaccines; and
- raise awareness about the links between COVID-19 and NCDs, how people living with NCDs can protect themselves, their families and communities from COVID-19 and how they can access and maintain safe continuity of care for their condition;

(b) Beyond COVID-19 (all hazards):

- work towards achieving strong and resilient health systems with UHC and PHC, as an essential foundation for effective preparedness and response to public health emergencies:
 - include policies, programmes and services for the prevention and control of NCDs and their modifiable risk factors as part of national and subnational efforts to strengthen health systems to better prepare for, respond to and recover from health emergencies, through a multisectoral all-hazards approach;
 - meaningfully involve people living with NCDs, affected communities and those in vulnerable situations, including forcibly displaced populations and refugees, in order to better understand their health needs, empower their individual emergency preparedness and shape NCD health policies, programmes and services;
 - take steps to ensure that a minimum set of quality NCD services are made available to affected populations, as part of a prioritized essential NCD health package to be

guaranteed during any health emergency, at various levels of care, considering national humanitarian and health system contexts;

- accelerate the implementation of national NCD road maps, ensuring that national benefit packages include a bundle of services for the prevention and control of NCDs and their risk factors, with sufficient pre-payment mechanisms to minimize financial hardship for people with NCDs;
- develop strategies and tools to strengthen core public health capacities and workforces for the provision of NCD services in humanitarian settings, including through digital health solutions;
- ensure access to essential, safe, affordable, quality and effective NCD medicines and supplies in emergency preparedness and response plans and as part of emergency procurements, pre-positionings and deployments, guided by WHO standard NCD kit and other essential bulk items, with appropriate consideration for cold chain-sensitive medicines such as insulin; and
- document countries experiences and promote research on NCD in humanitarian settings.

21. Recommended actions for **international, humanitarian partners, civil society and the private sector:**

- advocate for the inclusion of programmes and services for the prevention and control of NCDs and their modifiable risk factors as part of a multisectoral all-hazards approach to health emergency preparedness and responses, including in current COVID-19 country strategic preparedness and response plans;
- strengthen partnerships, global coordination and cooperation between United Nations agencies, humanitarian organizations, civil society, people living with NCDs and the private sector to support all countries, upon their request, in implementing their multisectoral national action plans, for strengthening their health systems response to health emergencies, including for maintaining the safe provision NCD services during them;
- support the development, implementation and continuity of a prioritized essential NCD health package to be guaranteed in health emergencies, at various levels of care, considering national and subnational humanitarian and health system contexts;
- support countries in building their public health and workforce capacity for integrated care in humanitarian settings, with strengthened capabilities to work across NCDs and other diseases/conditions;
- support countries to strengthen investment in research, evidence generation, enhanced guidelines, evaluation and monitoring to support contextual implementation and ensure quality and accountability;
- support countries in the procurement and deployment of essential, safe, affordable, quality and effective NCD medicines and supplies, including WHO standard NCD kits or other essential bulk items, with appropriate consideration for cold chain-sensitive medicines such as insulin;

- promote and support research on NCD in humanitarian settings; and
- support and advocate for people living with NCDs to be meaningfully consulted and engaged in the design, implementation and evaluation of NCD policies, programmes and services in humanitarian settings

22. Recommended actions for **WHO**:

- As part of ongoing efforts for strengthening WHO preparedness for and response to health emergencies and reinforcing its leadership and coordination of the Inter-Agency Standing Committee Health Cluster and its complementarity to other humanitarian actors:
 - review current WHO NCD-related responses in countries in emergencies and suggest a strategic approach to improving WHO technical assistance to countries across preparedness, response and recovery, leveraging crises as an entry point to build health systems back better through development of sustainable NCD services;
 - strengthen collaboration and communication across WHO, including with the Global Health Cluster and other humanitarian partners such as the Informal Interagency Group on NCDs in Humanitarian Settings, in order to enhance WHO leadership and normative functions and better assist countries in emergencies;
 - in collaboration with the WHO Emergency Health Programme, the Global Health Cluster and other humanitarian and academic partners, develop a prioritized essential NCD health package to be guaranteed in health emergencies, at various levels of care, considering national humanitarian and health system contexts, drawing on the WHO UHC Compendium;
 - support countries in the prioritization, procurement and deployment of essential, safe, affordable, quality and effective NCD medicines and supplies, including WHO standard NCD kits and essential bulk items, with appropriate consideration for cold chain-sensitive medicines such as insulin;
 - support countries in building their public health and workforce capacity for integrated care in humanitarian settings, with strengthened capabilities to work across NCDs and other diseases/conditions;
 - strengthen WHO's normative role and technical capacity to develop and disseminate normative products, technical guidance, tools, data and scientific evidence in order to support countries in developing and implementing national response plans to health emergencies, with necessary provisions for treating people living with NCDs and for preventing and controlling their risk factors in humanitarian emergencies;
 - further advocate with donors the prioritization of building bridges with a view to prioritizing NCDs in humanitarian emergencies across the health, development and peace-building sectors;
 - strengthen global, regional and country preparedness and response capabilities and capacities for health emergencies by enhancing the meaningful engagement of people

living with NCDs in the planning, implementation and evaluation of national preparedness and response plans; and

- engage WHO NCD technical advisory groups and other academic partners to shape the research agenda and document country experiences in order to inform policies for strengthening NCD emergency preparedness and responses.

ANNEX 5

**PROGRESS IN THE IMPLEMENTATION OF THE GLOBAL STRATEGY
TO ACCELERATE THE ELIMINATION OF CERVICAL CANCER
AS A PUBLIC HEALTH PROBLEM AND ITS ASSOCIATED GOALS
AND TARGETS FOR THE PERIOD 2020–2030**

1. This Annex sets out the progress achieved in the implementation of resolution WHA73.2 on the global strategy to accelerate the elimination of cervical cancer as a public health problem and its associated goals and targets for the period 2020–2030.

Context

2. The Secretariat launched the global strategy to accelerate the elimination of cervical cancer as a public health problem on 17 November 2020. Campaigns, health care worker training events and advocacy events were organized by governments, civil society and partners in countries across all regions, ushering in the global strategy with actions that advanced its implementation.

3. The global strategy outlines three key steps: vaccination, screening and treatment. Successful implementation of these steps could reduce more than 40% of new cases of the disease and 5 million related deaths by 2050. Data for 2020 show that age-standardized cervical cancer incidence rates varied from 84 per 100 000 women in the highest-risk countries to less than 10 per 100 000 women in the lowest-risk countries.¹

4. To eliminate cervical cancer, all countries must reach and maintain an incidence rate of below four per 100 000 women. In particular:

- (a) achieving that goal rests on three key pillars and their corresponding targets:
 - (i) vaccination: 90% of girls fully vaccinated with the HPV vaccine by the age of 15;
 - (ii) screening: 70% of women screened using a high-performance test by the age of 35 and again by the age of 45; and
 - (iii) treatment: 90% of women with pre-cancer treated and 90% of women with invasive cancer managed; and
- (b) each country should meet the 90–70–90 targets by 2030 to get on the path to eliminate cervical cancer within the next century.

5. Despite the disruptions caused by the COVID-19 pandemic, WHO continues to respond to requests for support and technical assistance from Member States that prioritize cervical cancer elimination.

¹ See Global Cancer Observatory. World Health Organization/International Agency for Research on Cancer (<http://gco.iarc.fr/>, accessed 1 December 2021).

WHO guidance and tools

6. WHO has published various normative products to support countries in the implementation of the interventions recommended in the global strategy.

7. **Human papillomavirus (HPV) vaccination.** The introduction of HPV vaccine in national immunization schedules had progressed to 111 countries by July 2021 and is expected to reach 120 countries end-2021, while 40 countries also offer the vaccine to boys. Suboptimal levels of HPV coverage remain a concern, with few countries reaching the 90% target. Due to the COVID-19 pandemic, for the first time the global coverage for HPV vaccination declined – from 15% in 2019 to 13% in 2020. The decline was in particular attributed to reduced coverage in low- and middle-income countries. Countries started efforts by end-2020 for catch-up vaccinations of missed girls and will need to sustain those efforts to improve their coverage. A fourth HPV vaccine has been prequalified by WHO.¹

8. The Secretariat published a guide to help monitor HPV vaccination coverage at the country level.² WHO also published an updated WHO HPV Vaccine Global Market Study³ and has taken steps to further alleviate supply constraints.

9. **Screening and treating precancerous lesions.** The second edition of the WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention was launched in July 2021. It addresses the needs of the general population of women and women living with HIV and includes new and updated recommendations and good practice statements for women living with HIV. It also emphasizes the need for countries to transition to the use of high-performance screening test, such as HPV molecular tests.⁴ WHO also published a new guidance on introducing and scaling up testing for HPV as part of a comprehensive programme for the prevention and control of cervical cancer.⁵ To support countries to implement the guideline, WHO published a paper on the importance of implementation research for the introduction of new, evidence-based interventions.

10. **Women living with HIV.** WHO's initial estimates⁶ of the contribution of HIV to the global cervical cancer burden showed that women living with HIV have a sixfold greater risk of cervical cancer compared to women without HIV. The Secretariat developed a policy brief to support countries to scale up access to and uptake of cervical cancer screening and treatment among women living with HIV, using quality modern technologies.⁷ In addition, WHO published updated consolidated guidelines on HIV

¹ Cervical Cancer Country Profiles. Geneva: World Health Organization; 2021 (<https://www.who.int/teams/noncommunicable-diseases/surveillance/data/cervical-cancer-profiles>, accessed 10 December 2021).

² WHO. Human papillomavirus (HPV) vaccine coverage monitoring manual. Geneva: World Health Organization; 2020.

³ Global market study. HPV vaccines. Geneva: World Health Organization; 2019.

⁴ WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention, 2nd ed. Geneva: World Health Organization; 2021.

⁵ Introducing and scaling up testing for human papillomavirus as part of a comprehensive programme for prevention and control of cervical cancer: a step-by-step guide. Geneva: World Health Organization; 2020

⁶ Stelzle D, Tanaka LF, Lee KK, Khalil AI, Baussano J, Shah ASV, et al. Estimates of the global burden of cervical cancer associated with HIV. *Lancet Glob Health*. 2021; 9: e161–69. doi: 10.1016/S2214-109X(20)30459-9.

⁷ New WHO recommendations on screening and treatment to prevent cervical cancer among women living with HIV: policy brief. Geneva: World Health Organization; 2021.

prevention, testing, treatment, service delivery and monitoring, including a chapter dedicated to the prevention of cervical cancer for women living with HIV.¹ New indicators to measure progress in screening and treatment for cervical pre-cancer and cancer will be included in the annual Global AIDS Monitoring reporting system.

11. **Invasive cancer treatment and palliative care.** The WHO Framework for strengthening and scaling-up services for the management of invasive cervical cancer² was developed to underpin the third pillar of the global strategy and to assist countries to reach the target of treating 90% of women diagnosed with invasive cancer. In collaboration with the International Atomic Energy Agency, WHO released an interagency guidance³ to enable the effective procurement of equipment utilized in cervical cancer treatment. The WHO Model List of Essential Medicines was updated for medicines used for the treatment of invasive cervical cancer.

12. WHO-commissioned research demonstrated that physical, psychological, spiritual and social suffering is highly prevalent and often severe and multifaceted among women with cervical cancer. Essential augmented packages for palliative care for women with cervical cancer were proposed.^{4,5,6}

13. **Post-market surveillance of medical devices.** To support the safe operation of devices used in cervical cancer programmes as these programmes scale up, WHO published a policy brief on the implementation of post-market surveillance in cervical cancer programmes.⁷

14. **Costing national cervical cancer programme.** WHO supported several Member States to estimate the costs of the implementation of their national plans for cervical cancer elimination. The costing plans were published for the benefit of other Member States' planning processes.⁸

15. **Surveillance, monitoring and evaluation.** In collaboration with the International Agency for Research on Cancer (IARC), WHO has developed a draft framework for monitoring the global strategy implementation. Furthermore, in order to establish a baseline for subsequent monitoring, WHO is developing a first set of estimates of global, regional and country cervical cancer screening coverage. Another tool – cervical cancer country profiles – provides a snapshot of the status of countries' national cervical cancer control plans and link cervical cancer-specific indicators with global strategy priority

¹ Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021.

² WHO framework for strengthening and scaling-up of services for the management of invasive cervical cancer. Geneva: World Health Organization; 2020.

³ Technical specifications of radiotherapy equipment for cancer treatment. Geneva: World Health Organization; 2021.

⁴ Krakauer EL, Kwete X, Kane K., Afshan G, Bazzett-Matabel L, Bien-Aimé, et al. Cervical Cancer-Associated Suffering: Estimating the Palliative Care Needs of a Highly Vulnerable Population. *JCO Glob Oncol.* 2021;7:862–872. doi: 10.1200/GO.21.00025.

⁵ Krakauer EL, Kane K, Kwete X, Afshan G, Bazzett-Matabel L, Ruthnie Bien-Aimé D, et al. Essential Package of Palliative Care for Women With Cervical Cancer: Responding to the Suffering of a Highly Vulnerable Population. *JCO Glob Oncol.* 2021;7:862-872. doi: 10.1200/GO.21.00025.

⁶ Krakauer EL, Kane K, Kwete X, Afshan G, Bazzett-Matabel L, Ruthnie Bien-Aimé D, et al. Augmented Package of Palliative Care for Women With Cervical Cancer: Responding to Refractory Suffering. *JCO Glob Oncol.* 2021;7:886-895. doi: 10.1200/GO.21.00027.

⁷ Implementation of post-market surveillance in cervical cancer programmes: policy brief for manufacturers of medical devices, including in vitro diagnostic medical devices. Geneva: World Health Organization; 2021.

⁸ Costing the National Strategic Plan on Prevention and Control of Cervical Cancer. Geneva: World Health Organization; 2020.

interventions. All products will be released in late 2021. A portal has been launched to provide access to WHO data on HPV vaccine introductions in countries and the trends in vaccination coverage in HPV programmes to monitor progress towards achieving the 2030 targets.¹

16. **Research and innovation.** WHO has been developing a framework of evidence generation for AI-based medical devices, training, validation and evaluation, which includes specific chapters on cervical cancer screening as a top-priority use case for the application of AI.

17. **Knowledge repository.** A web-based tool has been developed to facilitate access to guidance and tools published across WHO and other partners, which are relevant for the implementation of the global strategy.

Support for Member States, giving priority to high-burden countries

18. All WHO regions took actions to provide support to Member States in implementing cervical cancer interventions. This report highlights examples of progress in WHO regions but does not necessarily provide a complete list of all achievements.

19. **African Region.** The African Region includes 19 of the 20 Member States with the highest burden of cervical cancer. In 2020, it accounted for 21% of global cervical cancer mortality. To respond to the challenge, the Regional Office for Africa has been strengthening the regional capacity to provide support and integrated assistance to countries. The 71st session of the Regional Committee for Africa adopted a regional framework for the implementation of the global strategy.²

20. Support for scaling up cervical cancer programmes and technical support have been provided to Guinea, Kenya, Malawi, Nigeria, Rwanda, Togo, Uganda and Zambia to update their cervical cancer guidelines and strategies. In other countries, the national cancer control plans were reviewed and adapted to global strategy targets and priority interventions. As of 2020, WHO provided technical and financial support for HPV vaccination in Cabo Verde, Cameroon and Mauritania, with the result that a total of 19 countries have nationally introduced HPV vaccination. A total of 11 Member States (Burkina Faso, Côte d'Ivoire, Kenya, Malawi, Nigeria, Rwanda, Senegal, South Africa, Uganda, Zimbabwe and Zambia) are also being supported in the uptake of the high-performance screening technology.

21. **Region of the Americas.** A comprehensive cervical cancer virtual training program and a basic course on palliative care continue to be rolled out through the Pan American Health Organization (PAHO) virtual public health campus for health care providers. A virtual tele-mentoring programme on cervical cancer elimination was established, creating a community of practice and sharing of experiences on cervical cancer prevention. On palliative care, monthly virtual tele-mentoring sessions have separately been developed, with several sessions devoted to issues specific to women with cervical cancer.

22. Country-specific national elimination plans have been elaborated in Chile, Honduras, Jamaica, Paraguay and Suriname. In El Salvador, HPV testing has been expanded and HPV vaccines have begun to be introduced. Guatemala has begun to introduce HPV testing with support from Unitaid and with the engagement of WHO regional and country offices. Chile has instituted an awareness-raising campaign

¹ See <https://cceirepository.who.int/> (accessed 10 December 2021).

² See document AFR/RC71/9.

to encourage women to seek cervical cancer screening. Paraguay is updating its guideline and developing a national training programme to reinforce capacity for screening and pre-cancer treatment.

23. **Eastern Mediterranean Region.** The Regional Office for the Eastern Mediterranean conducted a regional situation analysis to determine the current burden and capacity to achieve the global targets; in partnership with IARC, it also provided technical assistance for most countries to strengthen their cancer registries.

24. Only three countries have introduced the HPV vaccine, while nine countries provide cervical cancer screening services. The Regional Office supported Morocco's training of health care workers to facilitate HPV vaccine introduction. It also mobilized targeted support to develop national cervical cancer screening programmes in Iran, Iraq, Jordan, Sudan, Morocco and Saudi Arabia. Sudan, Morocco and Saudi Arabia received technical and financial support to respond to cervical cancer national assessment and treatment needs. Regional advocacy efforts to facilitate introduction of the HPV vaccine are planned in Gavi, the Vaccine Alliance eligible countries – Afghanistan, Djibouti and Sudan.

25. **European Region.** The Regional Office for Europe is developing a regional road map on cervical cancer elimination. Technical support for cervical cancer screening and early diagnosis has continued in Kyrgyzstan, Georgia, Belarus, Romania and Uzbekistan, including capacity-building and policy dialogues. The Regional Office has provided intensive technical assistance and training to Uzbekistan to support the implementation of all three pillars of the global strategy.

26. Uzbekistan plans to conduct catch-up HPV vaccinations of girls aged 11–14 in October 2021. In May 2021, Kyrgyzstan made a decision to introduce HPV vaccine for routine immunization of 11-year-old girls as of September 2022 and to conduct catch-up vaccinations of girls up to the age of 14. With the help of WHO and the United Nations Population Fund (UNFPA), Uzbekistan launched a cervical cancer screening pilot in June 2021 to screen 56 000 women with HPV tests in two administrative regions.

27. **South-East Asia Region.** The Regional Office for South-East Asia launched an implementation framework for the elimination of cervical cancer as a public health problem for 2021–2030 at the 74th session of the Regional Committee for South-East Asia. Training in cervical cancer screening and the management of precancerous lesions based on the regional training package¹ as well as training in colposcopy² have been provided to Member States. An advocacy and educational video was launched in 2021 to promote the efforts to eliminate cervical cancer in the region.

28. The Regional Office is reviewing the existing national guideline on screening and management of precancerous lesions to facilitate its alignment with WHO recommendations. Seven countries have introduced HPV vaccination into national immunization plans, while five countries (Bhutan, the Maldives, Myanmar, Sri Lanka and Thailand) have introduced it in nationwide programmes and two countries (India and Indonesia) have introduced it at subnational levels and WHO provided support to

¹ See Cervical cancer screening and management of cervical pre-cancers. WHO Regional Office for South-East Asia (<https://www.who.int/southeastasia/activities/cervical-cancer-screening-and-management-of-cervical-pre-cancer>, accessed 1 December 2021).

² See IFPC/IARC Training course in colposcopy and the prevention of cervical cancer. World Health Organization/International Agency for Research on Cancer (<https://screening.iarc.fr/elearningifcpc.php>, accessed 1 December 2021).

Myanmar in 2020. HPV testing is used in Thailand as a primary screening test and Myanmar completed a pilot project to introduce this high-performance screening test.

29. **Western Pacific Region.** Mongolia has been introducing HPV testing. The Regional Office for the Western Pacific provided support to Vanuatu, with an emphasis on cervical cancer prevention, including screening, diagnosing and treatment of women with early-stage cancers. To further support demand generation for services, advocacy and communication material on cervical cancer are being developed with the Federated States of Micronesia. WHO is also providing the Government of Solomon Islands with vital equipment for the treatment of precancers. Tuvalu introduced the HPV vaccination in September 2021.

Collaboration with partners

30. WHO collaborated with the Joint United Nations Programme on HIV/AIDS (UNAIDS) at the 47th session of the UNAIDS Programme Coordinating Board (15–18 December 2020), at which the thematic segment focused on cervical cancer and HIV.

31. To support HPV vaccination introduction, WHO continues to collaborate with Gavi and technical partners, including through global-level HPV vaccine access dialogues, in order to facilitate the equitable distribution of HPV vaccines. Additional ongoing collaboration, with a multipartner effort coordinated by Unitaid and with procurement support from UNICEF, aims to expand access to secondary prevention services, including efforts to lay the foundation on which to scale up national services and to improve access to innovative technologies.

32. Other high-level engagements involved the Commonwealth Secretariat and the African Union Commission, including the awareness-raising efforts at the level of Commonwealth health ministers to advocate for Member States to commit to the global strategy implementation.

33. United Nations agencies, including UNFPA, UNICEF and UNAIDS, are aligning their strategies with the inclusion of cervical cancer elimination targets.

The way forward

34. **Support countries to accelerate the implementation of the global strategy.** The Secretariat will work with governments and other partners to accelerate the implementation of the global strategy to achieve the targets set for 2030. WHO will also support countries to strengthen the integration of cervical cancer prevention and care in PHC, sexual and reproductive health services and HIV and other service points and outreach programmes. Global and national partnerships, including with advocates and survivors who have fought the disease, will be promoted to advance cervical cancer elimination.

ANNEX 6

PROGRESS ACHIEVED IN THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES AND THE PROMOTION OF MENTAL HEALTH

1. Decision WHA72(11) requested the Director-General to report on the progress achieved in the prevention and control of NCDs and the promotion of mental health with an annual report to be submitted to the Health Assembly through the Executive Board, from 2021 to 2031.
2. The first part of this Annex contains the report on the progress achieved in the prevention and control of NCDs. The second part of the Annex covers the promotion of mental health.

PART I. PREVENTION AND CONTROL OF NCDs

Where we are today

3. One decade after the first high-level meeting of the United Nations General Assembly on the prevention and control of NCDs, new data from WHO shows that the targets are not just aspirational but achievable:
 - a total of 34 countries have implemented 10 or more of the commitments made on the prevention and control of NCDs at the United Nations General Assembly,¹ while 66 countries have implemented fewer than 5 commitments, including 4 countries that have implemented none of them;
 - no countries are on track to achieve all nine voluntary global targets for 2025 set by the World Health Assembly in 2013 against a baseline in 2010; and
 - a total of 14 countries are on track to meet SDG target 3.4 for 2030, as measured by indicator 3.4.1, set by the United Nations General Assembly against a 2015 baseline.
4. The data shows that countries with policy, legislative and regulatory measures, including fiscal measures, for the prevention and control of NCDs, as well as strong and inclusive health systems have had the best outcomes against NCDs. In those countries, people living with and affected by NCDs are more likely to have access to effective NCD services, including protection against NCD risk factors, screening for hypertension and diabetes, treatment of NCDs and consistent, quality follow-up and care.

¹ Commitments contained in United Nations General Assembly resolutions 66/2, 68/300 and 73/2, as monitored through the WHO NCD Progress Monitor in line with the WHO technical note issued in May 2015 and updated in September 2017 in response to decision EB136(13) (see <https://www.who.int/nmh/events/2015/Updated-WHO-Technical-Note-NCD-Progress-Monitor-September-2017.pdf>)

The global burden of NCDs and risk factors during the past 20 years

5. Deaths from NCDs are on the rise. The global share of NCD deaths among all deaths increased from 61% in 2000 to 74% in 2019.¹ At the global level, 7 of the 10 leading causes of death in 2019 were NCDs:²

- **1st leading cause of death.** The world's biggest killer is ischaemic heart disease, which is responsible for 16% of the world's total deaths. Since 2000, deaths due to this disease increased the most, by more than 2 million, to reach 8.9 million deaths in 2019.
- **2nd and 3rd leading causes of death.** Stroke and chronic obstructive pulmonary disease are the 2nd and 3rd leading causes of death and are responsible for approximately 11% and 6% of total deaths, respectively.
- **6th leading cause of death.** Trachea, bronchus and lung cancers deaths have risen from 1.2 million to 1.8 million deaths and are now ranked 6th among leading causes of death.
- **7th leading cause of death.** In 2019, Alzheimer's disease and other forms of dementia ranked as the 7th leading cause of death.
- **9th leading cause of death.** Diabetes has entered the top 10 causes of death, following a significant percentage increase of 70% since 2000.
- **10th leading cause of death.** Kidney diseases have increased from the world's 13th leading cause of death to the 10th leading cause, from 813,000 deaths in 2000 to 1.3 million deaths in 2019.

6. As classified by World Bank income group:²

- 3 of the 10 leading causes of death in low-income countries are NCDs;
- 5 of the 10 leading causes of death in lower-middle-income countries are NCDs;
- 8 of the 10 leading causes of death in upper-middle-income countries are NCDs; and
- 9 of the 10 leading causes of death in high-income countries are NCDs.

7. Trends in deaths resulting from NCDs at all ages were driven by diverse changes across regions in 2000–2019. Globally, the greatest decline in mortality was seen for chronic respiratory diseases, with a 37% decline for all ages, followed by cardiovascular diseases (27%) and cancer (16%).³ However, the

¹ World Health Statistics 2020. A visual summary. Geneva: World Health Organization; 2020.

² The top 10 causes of death. Fact sheet. Geneva: World Health Organization; 2020.

³ World Health Statistics 2020. A visual summary. Geneva: World Health Organization; 2020.

progress is not comparable to that made for curbing communicable diseases and is unequal across regions and income groups.¹ Diabetes has shown an unfavourable trend, with a 3% increase.²

8. Deaths due to NCDs between the ages of 30 and 70 (“premature” deaths) – the most economically productive age span – are rapidly increasing.³

Age at death due to NCDs	2000 (M)	2010 (M)	2015 (M)	2019 (M)
> 70 years of age	16.8	19.9	21.8	23.8
30–70 years of age*	12.7	13.7	14.7	15.7
< 30 years of age	1.7	1.5	1.4	1.4
Total deaths	31.2	35.1	37.9	40.9

NCD deaths at *30–70 years of age	2000 (M)	2010 (M)	2015 (M)	2019 (M)
Cardiovascular diseases	5.3	5.6	5.9	6.2
Cancers	3.7	4.2	4.5	4.9
Diabetes	0.4	0.5	0.6	0.7
Chronic respiratory diseases	1.1	1.1	1.1	1.1
Mental health conditions	0.4	0.4	0.5	0.6
Other	1.8	2.0	2.1	2.2
Total	12.7	13.7	14.7	15.7

9. Cardiovascular diseases continue to be the main NCD that claims the largest number of lives among people in the 30–70 age group, yet the progress of mortality reduction is slowest among all country-income groups.⁴

10. Some 85% of premature deaths from NCDs in 2019 occurred in low- and middle-income countries³ due to demographic trends (principally the rapid growth of the proportion of the population aged 30–70 in low-income countries resulting from the rapid decline in communicable diseases and attributable deaths) and health transitions in low-income and lower-middle-income countries.

11. Measuring the risk of dying between the ages of 30 and 70 from any cardiovascular disease, cancer, diabetes or chronic respiratory disease (SDG indicator 3.4.1 against a 2015 baseline) is important

¹ World health statistics 2021: monitoring health for the SDGs, sustainable development goals. Geneva: World Health Organization; 2021.

² World Health Statistics 2020. A visual summary. Geneva: World Health Organization; 2020.

³ SDG Target 3.4 Non-communicable diseases and mental health. Geneva: World Health Organization (https://www.who.int/data/gho/data/themes/topics/sdg-target-3_4-noncommunicable-diseases-and-mental-health, accessed 1 December 2021).

⁴ World health statistics 2021: monitoring health for the SDGs, sustainable development goals. Geneva: World Health Organization; 2021.

to assess the extent of burden from mortality due to NCDs in a population. The global risk has declined more than one fifth, from 22.9% in 2000 to 17.8% in 2019.¹

Risk of dying between the ages of 30 and 70 from any cardiovascular disease, cancer, diabetes or chronic respiratory disease

Country income group	2000 (%)	2010 (%)	2015 (%)	2019 (%)
Low-income	28.3	25.7	24.5	23.9
Lower-middle-income	25.8	24.2	23.1	22.4
Upper-middle-income	24.3	20.2	18.2	17.4
High-income	16.4	13.2	12.4	11.3
Global	22.9			17.8

12. Despite the reduction achieved at the start of this century, this progress has not been sustained. Data shows an alarming slowdown in the rate of decline, from -1.6% in the period 2000–2010 to -1.1% in the period 2010–2016.² The South-East Asia Region and the Eastern Mediterranean Region had the slowest 20-year declines, at about 13%, less than half of that seen in the European Region (31%) and the Western Pacific Region (27%). The African Region (20%) and the Region of the Americas (23%) had similar reductions³ since the start of the century.

13. Premature mortality from NCD parallels – and can partly be attributed to – a lack of success in addressing many NCD risk factors. Although tobacco use is steadily declining, the prevalence of obesity is on the rise and the pace of reduction in harmful alcohol consumption has stagnated globally² while such consumption is increasing in the Americas, South-East Asia and the Western Pacific regions.¹

National capacity for NCD prevention and control

14. The results of the 2021 assessment of national capacity for NCD prevention and control through the use of a global survey to all Member States known as the NCD Country Capacity Survey⁴ showed that, with regard to NCD infrastructure and resourcing in national governments, 98% of countries had a unit, branch or department responsible for NCDs within their ministry of health, with nearly all having at least one full-time technical or professional staff member working in the unit, branch or department. Dedicated staff for each of the NCDs and the major NCD risk factors were reported by most countries for all NCD-related topics; staff dedicated to chronic respiratory diseases and oral diseases were the least prevalent worldwide. More than 80% of countries reported having funding available for the following NCD-related areas: health care and treatment (90%); primary prevention (85%); health promotion (85%); early detection and screening (85%); surveillance, monitoring and evaluation (83%) and capacity-building (83%). Funding for was slightly less prevalent for palliative care (71%) and

¹ World Health Statistics 2020. A visual summary. Geneva: World Health Organization; 2020.

² SDG Target 3.4 Non-communicable diseases and mental health. Geneva: World Health Organization (https://www.who.int/data/gho/data/themes/topics/sdg-target-3_4-noncommunicable-diseases-and-mental-health, accessed 1 December 2021).

³ World health statistics 2021: monitoring health for the SDGs, sustainable development goals. Geneva: World Health Organization; 2021.

⁴ NCD Country Capacity Survey. Geneva: World Health Organization (<https://www.who.int/teams/ncds/surveillance/monitoring-capacity/ncdcs>, accessed 1 December 2021).

NCD-related research (65%) lagged further still. Taxation on alcohol and tobacco were widely implemented; however, other fiscal incentives, such as taxation on sugar-sweetened beverages and foods high in fats, sugar or salt, were not widely utilized.

15. An operational national multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and the accountability of sectors beyond health was present in more than half of countries globally (58%). While the vast majority of countries (89%) included NCDs in the outputs or outcomes of their national health plans, fewer than two thirds (63%) had set NCD targets in line with the nine voluntary global targets from the WHO Global Monitoring Framework for NCDs.¹

16. Just over two thirds of countries (70%) had operational, integrated policies, strategies or action plans on NCDs, but only 53% reported that these policies were multisectoral and covered all four NCD risk factors and included early detection, treatment and care for the four main NCDs. For nutrition-related areas, the rate of implementation of a number of recommended policies was generally low, with fewer than half of countries implementing policies to reduce the impact of the marketing of unhealthy foods to children or to reduce the consumption of fat. Policies aiming to reduce the population's consumption of salt were somewhat more prevalent, with just over half of countries reporting operational policies (51%). Fifty-seven per cent (57%) of countries had implemented a recent educational campaign on physical activity.

17. The surveillance of NCDs continued to be the responsibility of one or more departments in the ministry of health in the large majority of countries. Just over half of countries (54%) reported having population-based cancer registries and slightly fewer countries (51%) reported having a diabetes registry. About half of countries reported having completed a recent, national survey among adults for each of the major risk factors for NCDs, with the exception of salt/sodium intake, for which fewer than 40% of countries reported collecting recent, national data. However, well over one third of countries (39%) had not collected population-based data for any of the risk factors through a recent, national survey of adults.

18. Over half of countries (59%) reported having national guidelines available for all four of the main NCDs; guidelines for chronic respiratory diseases were the least prevalent. National screening programmes for breast cancer and cervical cancer were reported by nearly three quarters of countries (70% and 74%, respectively). Of the six essential technologies for early detection, diagnosis and monitoring of NCDs – measurements of height; of weight; of blood glucose; of blood pressure; and of total cholesterol; and urine strips for albumin assay – just over half of countries (53%) reported all were generally available in primary care facilities of the public health sector. Most of the remaining countries had at least four of the six technologies generally available. The availability of essential NCD medicines was more uneven. Although approximately half of countries (53%) reported all were generally available, while more than one in five countries (22%) reported only 6 or fewer of the 11 essential medicines were generally available. Cardiovascular risk stratification was reported as being offered by most countries (77%); however, only about half of these countries reported it as widely available (i.e. offered in over 50% of health care facilities).

19. Of the procedures for treating NCDs, dialysis was most widely available (71% reported it as being generally available in the publicly funded health system), followed by thrombolytic therapy (62%) and retinal photocoagulation (55%). While stenting and coronary bypass were also reported as generally available by a slim majority of countries (55% and 54%, respectively), renal transplantation (42%) and

¹ NCD Global Monitoring Framework. Geneva: World Health Organization (<https://www.who.int/teams/ncds/surveillance/monitoring-capacity/gmf>, accessed 1 December 2021).

bone marrow transplantation (35%) were markedly less common. Cancer diagnosis and treatment services, including the availability of cancer centres or cancer departments at the tertiary level of care, were generally more prevalent and were reported as being generally available in two thirds or more of countries. The exception was radiotherapy, with only 63% of countries reporting this service as being generally available. Palliative care, however, continued to be not widely available, with only about 40% of countries reporting that it reached at least half of patients in need.

20. The vast majority of countries (87%) reported that all or some ministry of health staff with responsibility for NCDs and their risk factors were supporting COVID-19 efforts either full-time or along with routine NCD activities, including 8% of countries that reported that all NCD staff were working full-time on COVID-19. Nearly two thirds (60%) of countries reported that ensuring the continuity of NCD services was included in the list of essential health services in their national COVID-19 response plan. In terms of disruption of activities, 64% of countries reported some disruption to ministry of health NCD activities in the preceding three months, with NCD risk-factor surveys and mass communication campaigns being the most commonly disrupted. Just over one third of countries reported complete or partial disruptions to hypertension management services (37%) or diabetes and diabetic complication management services (37%) in the preceding 3 months. While asthma services, cancer treatment and urgent dental care were each reported as disrupted in 30% of countries, services for cardiovascular emergencies were less widely reported as disrupted in the preceding three months (22% of countries).

PART II. PROMOTION OF MENTAL HEALTH

21. In resolution WHA66.8, the Sixty-sixth World Health Assembly adopted the comprehensive mental health action plan 2013–2020. In 2019, the Seventy-second World Health Assembly, in following up the political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases, extended the period of the action plan until 2030 in decision WHA72(11). In 2021, the Seventy-fourth World Health Assembly endorsed the updated comprehensive mental health action plan 2013–2030, including the plan's updated implementation options and indicators.

22. The updated action plan includes 10 global targets and associated indicators to measure progress. Baseline data for previously existing targets and indicators in the action plan were collected from Member States using the Mental Health Atlas in 2014. Progress was monitored in 2017 and again in 2020. Baseline data have also been collected from Member States in the Mental Health Atlas 2020 for new targets and indicators and future editions will enable the monitoring of progress.

23. The global situation for mental health remains challenging. Close to 1 billion people experience a mental disorder,¹ including 1 in 7 (14%) adolescents.² More than 1 of every 100 deaths is due to suicide,³ which is also the fourth leading cause of death in young people aged 15–29. Globally,

¹ Mental disorders: key facts. Geneva: World Health Organization (<https://www.who.int/news-room/fact-sheets/detail/mental-disorders>, accessed 1 December 2021).

² Adolescent mental health: key facts. Geneva: World Health Organization (<https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>, accessed 1 December 2021).

³ Suicide: key facts. Geneva: World Health Organization (<https://www.who.int/news-room/fact-sheets/detail/suicide>, accessed 1 December 2021).

US\$ 1 trillion is lost in economic productivity annually due to depression and anxiety alone.¹ The COVID-19 pandemic has caused widespread adversity and distress and has impacted many determinants that affect mental health and well-being.

24. In a report to the Seventy-fourth World Health Assembly, the Secretariat provided preliminary data on progress towards the objectives of the comprehensive mental health action plan 2013–2030, collected through the 2020 Mental Health Atlas survey. Data collection and analysis have since been completed. In total, 171 of WHO's 194 Member States (88%) submitted responses to the 2020 Atlas questionnaire; 75% of Member States reported having a stand-alone policy or plan for mental health and 57% reported a stand-alone mental health law, representing increases from 68% and 51%, respectively, in the 2014 baselines. The levels of public expenditure on mental health remain low, a global median of 2.1% of domestic government health expenditure. Of this expenditure, most spending (66%) is on mental hospitals. Worldwide, the median number of mental health workers is 13 per 100 000. However, only 49 countries, equivalent to 25% of all WHO Member States, reported integration of mental health into PHC.² For the first time, countries reported on the existence of systems for mental health and psychosocial preparedness for emergencies, although only 54 countries, corresponding to 28% of WHO Member States, reported the existence of such systems.

25. Regional initiatives have been undertaken to improve the situation. In the Region of the Americas, a mental health policy for Andean countries was developed with support from the Secretariat and approved by the ministers of health of the six Andean countries.³ In addition, the final report of the Regional Plan of Action on Mental Health 2015–2020 was completed and indicated that six of nine targets in the plan had been exceeded and two partially achieved. In the Western Pacific Region, a total of 60 mental health promotion and prevention programmes have been developed and are now functioning, while nearly 70% of countries report having multisectoral mental health and psychosocial support coordination platforms in place for responding to the COVID-19 pandemic. In the Eastern Mediterranean Region, the implementation of a regional framework for action to scale up mental health⁴ is ongoing, with regular evaluation, and a mental health in schools package was developed to enable educators to better support students' mental health in school settings.⁵ In the South-East Asia Region, many countries are implementing suicide prevention programmes. In the African Region, despite ongoing challenges in funding, several countries have developed new mental health plans or revised outdated laws. Mental health has also been integrated into multisectoral NCD plans in many countries. In the European Region, the 2021–2025 European Framework for Action on Mental Health was endorsed at the Seventy-first session of the WHO Regional Committee for Europe.⁶ The framework

¹ Mental health in the workplace: key facts. Geneva: World Health Organization (<https://www.who.int/news-room/fact-sheets/detail/mental-disorders>, accessed 1 December 2021).

² Mental Health Atlas 2020. Geneva: World Health Organization; 2021.

³ For more information, see *Política Andina de Salud Mental 2020*. Organismo Andino De Salud – Convenio Hipólito UNANUE; 2019.

⁴ See Regional Committee for the Eastern Mediterranean resolution EM/RC62/R.5.

⁵ For more information, see *Mental health and substance use. Mental health in schools training package*. Geneva: World Health Organization (<http://www.emro.who.int/mnh/publications/mental-health-in-schools-training-package.html>, accessed 1 December 2021).

⁶ See Regional Committee for Europe resolution EUR/RC71/R5.

operationalizes the comprehensive mental health action plan 2013–2030 in the region and articulates the key objectives of the newly established European Mental Health Coalition.¹

26. The WHO Special Initiative for Mental Health is ongoing and aims to further advance progress towards the objectives of the comprehensive mental health action plan 2013–2030 by ensuring that 100 million more people have access to quality and affordable care for mental health conditions.² In 2021, the initiative progressed from planning to implementation in Bangladesh, Jordan, Paraguay, the Philippines, Ukraine and Zimbabwe. Ministries of health took action to increase the inclusion of mental health care in UHC, with a particular focus on community access to care through PHC. These actions have included training PHC workers in WHO’s mental health gap action programme³ and the QualityRights eLearning programme,⁴ covering rights-based and recovery-oriented services, improving mental health planning and coordination from national to provincial and district levels, and establishing strategies to strengthen mental health systems through leadership, financing, workforce development, essential medicines and quality of services. Ongoing resource mobilization efforts also supported Nepal in joining the initiative in 2021. In 2022, Ghana will begin implementation.

27. The Secretariat continues to provide technical support to Member States on the priority areas identified in the comprehensive mental health action plan 2013–2030. In 2021, the Secretariat began an update of WHO’s mental health gap action programme’s evidence-based guidelines for the management of mental, neurological and substance use disorders and is finalizing guidelines on mental health in the workplace. In addition, the WHO QualityRights initiative continued to provide technical support on implementing person-centred and human rights-based approaches in mental health services, advocacy, policy and law. Capacity-building through the initiative has accelerated and more than 24 000 individuals have received training using QualityRights face-to-face and e-training programmes.

28. The online database WHO MiNDbank continues to provide access to more than 8000 national and international resources, including national policies, strategies, laws and service standards on mental health, substance use, disability and human rights from 192 countries. Since its launch, WHO MiNDbank has been accessed by 223 719 new users.

29. Informed by web-based consultations in 2020, the Secretariat is preparing a World Mental Health Report to be released in early 2022. The report will provide information and evidence on the status of mental health across the world, while describing the need and ways to transform and expand action on mental health in countries.

30. The Secretariat has also promoted progress through multiple initiatives and products. WHO issued guidance on community-based mental health services that are person-centred, recovery-oriented, respect

¹ For more information, see: The Mental Health Coalition: a WHO/Europe flagship initiative. WHO Regional Office for Europe; 2020.

² For more information, see WHO Special Initiative for Mental Health. Geneva: World Health Organization (<https://www.who.int/initiatives/who-special-initiative-for-mental-health>, accessed 1 December 2021).

³ Mental Health Gap Action Programme (mhGAP). Geneva: World Health Organization (<https://www.who.int/teams/mental-health-and-substance-use/treatment-care/mental-health-gap-action-programme>, accessed 1 December 2021).

⁴ QualityRights materials for training, guidance and transformation. Geneva: World Health Organization (<https://www.who.int/publications/i/item/who-qualityrights-guidance-and-training-tools>, accessed 1 December 2021).

human rights and address the social determinants of mental health. This guidance is accompanied by seven technical packages, each focused on a specific category of service.¹

31. The Secretariat also launched an updated suicide worldwide report in June 2021.² According to WHO's updated Global Health Estimates, there were 703 000 cases of suicide globally in 2019, an age-standardized rate of 9 suicides per 100 000. In response, the Secretariat also published a practical guide for implementing LIVE LIFE, WHO's approach to suicide prevention in countries.³ The LIVE LIFE approach covers practical aspects of implementing four evidence-based interventions for preventing suicide, plus six cross-cutting pillars fundamental to implementation.

32. The Secretariat continued its partnership with UNICEF in the 10-year Joint Programme on Mental Health and Psychosocial Well-being and Development of Children and Adolescents. WHO and UNICEF also collaborated to produce the Helping Adolescents Thrive Toolkit, a package of strategies to support the implementation of WHO's guidelines on mental health promotive and preventive interventions for adolescents.⁴

33. The Secretariat developed a guide on providing person-centred approaches to mental health care for people living with neglected tropical diseases.⁵ The Secretariat is currently working with many countries to identify and develop tools to support implementation.

34. The Secretariat continued work on scalable psychological interventions by producing Self-Help Plus (SH+): A Group-Based Stress Management Course for Adults,⁶ and Group Problem Management Plus (PM+),⁷ a group-based intervention for populations affected by adversity. Finally, WHO's Step-by-Step, a digital psychological intervention that emphasizes behavioural activation for depression via remote smartphone sessions, was tested in one of the largest randomized controlled trials ever conducted in the field of mental health. The trial included more than 1000 participants and was completed in Lebanon during the COVID-19 pandemic. A version of Step-by-Step for global use is being prepared.

35. In humanitarian emergency settings, the Secretariat provided ongoing support to countries with level 3 and level 2 emergencies (e.g., Yemen, Sudan, Armenia, Ethiopia, Ukraine, Lebanon and other countries). WHO also supported countries affected by emergencies through implementation of the first

¹ Guidance on community mental health services: Promoting person-centred and rights-based approaches. Geneva: World Health Organization; 2021.

² Suicide Worldwide in 2019. Geneva: World Health Organization, 2021.

³ LIVE LIFE: An Implementation Guide for Suicide Prevention in Countries. Geneva: World Health Organization; 2021.

⁴ WHO and UNICEF. Helping Adolescents Thrive Toolkit: Strategies to promote and protect adolescent mental health and reduce self-harm and other risk behaviours. Geneva: World Health Organization; 2021.

⁵ Mental health of people with neglected tropical diseases: towards a person-centred approach. Geneva: World Health Organization; 2020.

⁶ Self-Help Plus (SH+): A group-based stress management course for adults. Geneva: World Health Organization; 2021.

⁷ Group Problem Management Plus (Group PM+): Group psychological help for adults impaired by distress in communities exposed to adversity. Geneva: World Health Organization; 2021.

global interagency rapid deployment mechanism for mental health and psychosocial support.¹ In 2021, the Secretariat supported 27 experts deployed through this mechanism to assist the response in 25 countries, including in 12 WHO country offices. The Secretariat has also continued its partnership with UNICEF, UNHCR and UNFPA to develop the mental health and psychosocial support minimum services package, which provides guidance on a costed set of high-priority activities to meet the immediate critical needs of emergency affected populations.² WHO also co-chairs the Inter-Agency Standing Committee Reference Group on Mental Health and Psychosocial Support in Emergency Settings; through this group, the Secretariat and its partners have provided technical support to country-level working groups and have developed a wide range of resources available in numerous languages and accessible formats.³

36. The Secretariat continues to monitor the impact of the COVID-19 pandemic on mental health and mental health services. In 2021, a mental health and psychosocial support monitoring indicator was included in the COVID-19 Strategic Preparedness and Response Plan. Between January and March 2021, the Secretariat conducted the second round of the national pulse survey on the continuity of essential health services during the COVID-19 pandemic and found that services for mental, neurological and substance use (MNS) disorders were the most frequently disrupted service category, with nearly half of responding countries (45%) reporting disruptions.⁴ Overall, school mental health programmes (66%) and psychotherapy, counselling and psychosocial intervention (54%) services were the most disrupted. Life-saving emergency services, such as suicide prevention programmes (44%), management of emergency MNS manifestations (39%), critical harm reduction services (39%) and overdose prevention and management programmes (34%) were also among those disrupted.

37. To strengthen the Secretariat's capacity on mental health and integration of mental health into UHC, an online certified capacity-building course for public health programme managers on mental health and psychosocial support in emergencies is under development and will be launched in 2021 on the OpenWHO platform. A course for general practitioners on integrating mental health into general health care will also be launched through the WHO Academy in 2022.

38. In line with the requirements of resolution WHA67.8 on autism, the Secretariat is supporting efforts to improve countries' capacities to ensure access to evidence-based services for autism and other developmental disabilities, with a focus on supporting competency-based training at primary care and community levels through in-person and remote delivery. To improve impact in countries and through strengthened collaboration with UNICEF in the Joint Programme, a global report on developmental disabilities and a technical brief on nurturing care for children with developmental disabilities are being developed, with the active contribution of advocates and users. These products will complement ongoing efforts to monitor population-based early childhood development by providing strategies to enhance care systems and improve environments for persons with developmental disabilities.

¹ Mental Health and Psychosocial Support in humanitarian emergencies - DSS MHPSS. Netherlands Enterprise Agency; 2020 (<https://english.rvo.nl/subsidies-programmes/mental-health-and-psychosocial-support-humanitarian-emergencies-dss-mhpss>, accessed 1 December 2021).

² For more information, see The Mental Health and Psychosocial Support Minimum Services Package (<https://mhpssmsp.org/en>, accessed 1 December 2021).

³ Mental health and psychosocial support – resources for COVID-19. Inter-Agency Standing Committee.

⁴ Second round of the national pulse survey on continuity of essential health services during the COVID-19 pandemic. Geneva: World Health Organization; 2021.

ANNEX 7

**DRAFT INTERSECTORAL GLOBAL ACTION PLAN ON EPILEPSY
AND OTHER NEUROLOGICAL DISORDERS 2022–2031****BACKGROUND**

1. In November 2020, the Seventy-third World Health Assembly adopted resolution WHA73.10 requesting the Director-General of WHO, *inter alia*, to develop a 10-year intersectoral global action plan on epilepsy and other neurological disorders, in consultation with Member States, in order to promote and support a comprehensive, coordinated response across multiple sectors.
2. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 aims to improve access to care and treatment for people living with neurological disorders, while preventing new cases and promoting brain health and development across the life course. It seeks to support the recovery, well-being and participation of people living with neurological conditions, while reducing associated mortality, morbidity and disability, promoting human rights, and addressing stigma and discrimination through interdisciplinary and intersectoral approaches.
3. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 builds on previous global resolutions, decisions, reports and commitments, including resolution WHA68.20 on the global burden of epilepsy and the need for coordinated action at the country level to address its health, social and public knowledge implications. A number of preventive, pharmacological and psychosocial approaches are shared by epilepsy and other neurological disorders. This sharing of strategies and approaches (*i.e.*, synergies) can serve as valuable entry points for accelerating and strengthening services and support for epilepsy and other neurological disorders.

OVERVIEW OF THE GLOBAL SITUATION

4. Disorders of the nervous system are the leading cause of DALYs and the second leading cause of death globally, accounting for 9 million deaths per year. The four largest contributors of neurological DALYs in 2016 were stroke (42.2%), migraine (16.3%), dementia (10.4%) and meningitis (7.9%).¹ Globally in 2016, 52.9 million children younger than 5 years had developmental disabilities and 95% of these children lived in low- and middle-income countries.²
5. The high burden associated with neurological disorders is compounded by profound health inequities. For example, nearly 80% of the 50 million people with epilepsy live in low- and middle-income countries, where treatment gaps exceed 75% in most low-income countries and exceed 50% in most middle-income countries.³ Disabilities associated with neurological conditions inordinately

¹ Global, regional, and national burden of neurological disorders, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet Neurol.* 2019;18(5):459–480. doi: 10.1016/S1474-4422(18)30499-X. See also Global health estimates 2020: Disease burden by cause, age, sex by country and by region, 2000–2019. Geneva: World Health Organization; 2020.

² Developmental disabilities among children younger than 5 years in 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet.* 2018;6(10):E100–E1121. doi: 10.1016/S2214-109X(18)30309-7.

³ Epilepsy: a public health imperative. Geneva: World Health Organization; 2019.

affect women, older people, those living in poverty, rural or remote areas and other vulnerable populations. Women are also often disproportionately affected by neurological disorders, such as dementia, migraine and multiple sclerosis. Children from underprivileged households, indigenous populations, ethnic minorities and internally displaced or stateless persons, refugees and migrants are also at significantly higher risk of experiencing disability associated with neurological conditions.

6. Neurological disorders lead to increased costs for governments, communities, families and individuals, as well as to loss of productivity for economies. In 2010, brain disorders were estimated to cost € 798 billion in Europe alone.¹ In 2019, the total global societal cost of dementia was estimated at US\$ 1.3 trillion, equivalent to 1.5% of global GDP.²

7. Many neurological conditions are preventable, including 25% of the global burden of epilepsy cases.³ Numerous determinants, including environmental risk factors and protective factors, are known to impact brain development in early life and brain health across the life course. Protective factors for brain development in early life include components such as education, social connection and support, healthy diets, sleep and physical activity.

8. Worldwide, people living with neurological disorders and associated disabilities continue to experience discrimination and human rights violations. For this reason, the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 is underpinned by a human rights perspective that is grounded in the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of Persons with Disabilities, the Convention on the Rights of the Child and other relevant international and regional human rights instruments.

9. Supporting the appropriate health system building blocks is particularly important for improving the quality of life of people living with neurological disorders. The implementation of appropriate policy and legislative frameworks is crucial and should aim to promote quality care, provide financial and social protection benefits (including protection from out-of-pocket expenditures) and ensure respect, protection and fulfilment of the rights of people with neurological disorders. Comprehensive responses aimed at tackling neurological disorders should be firmly grounded in a social and economic determinants of health approach.

10. Health systems have not yet adequately responded to the burden of neurological disorders. While approximately 70% of people with neurological disorders live in low- and middle-income countries,⁴ their needs are poorly recognized, with only 28% of low-income countries reporting that they have a dedicated policy for neurological disorders.⁵ Currently, the number of health workers specialized in neurological health is insufficient to tackle the treatment gaps globally. The median neurological workforce (defined as the total number of adult neurologists, neurosurgeons and child neurologists) in

¹ J Olesen I, A Gustavsson, M Svensson, H-U Wittchen, B Jönsson, CDBE2010 study group, et al. The economic cost of brain disorders in Europe. *Eur J Neurol*. 2012; 19(1):155–162. doi: 10.1111/j.1468-1331.2011.03590.x.

² Global status report on the public health response to dementia. Geneva: World Health Organization; 2021.

³ Epilepsy: a public health imperative. Geneva: World Health Organization (www.who.int/publications/i/item/epilepsy-a-public-health-imperative, accessed 1 December 2021).

⁴ Feigin VL, Vos T, Nichols E, Owolabi MO, Carroll WM, Dichgans M, et al. The global burden of neurological disorders: translating evidence into policy. *Lancet Neurol*. 2020 Mar;19(3):255-265. doi: 10.1016/S1474-4422(19)30411-9.

⁵ ATLAS Country Resources for Neurological Disorders , second edition. Geneva: World Health Organization; 2017.

low-income countries is 0.1 per 100 000 people, compared to 7.1 per 100 000 people in high-income countries.¹

11. The ongoing COVID-19 pandemic highlights the relevance of neurology to global public health and its significance in broader global health dialogues. Disruption of services, medication inaccessibility, interruption in vaccination programmes and increased mental health issues have added to the burden of those with neurological disorders. More directly, neurological manifestations of COVID-19 infection are present in both the acute stage and the post-COVID-19 condition. Certain underlying neurological conditions represent a risk factor for hospitalization and death due to COVID-19, especially for older adults.² The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 represents an unprecedented opportunity to address the impact of neurological disorders through a comprehensive response throughout and following the pandemic.

SCOPE

12. The term “neurological disorders” is used to denote conditions of the central and peripheral nervous systems that include epilepsy; headache disorders (including migraine); neurodegenerative disorders (including dementia and Parkinson’s disease); cerebrovascular diseases (including stroke); neuroinfectious/neuroimmunological disorders (including meningitis, HIV, neurocysticercosis, cerebral malaria and multiple sclerosis); neuromuscular disorders (including peripheral neuropathy, muscular dystrophies and myasthenia gravis); neurodevelopmental disorders (including autism spectrum disorder and congenital neurological disorders); traumatic brain and spinal cord injuries; and cancers of the nervous system. While some neurological disorders are rare, they are still responsible for high morbidity and mortality.

13. In line with WHO’s International Classification of Functioning, Disability and Health, functioning and disability are considered the result of interactions between neurological conditions and contextual factors across the life course. For this reason, a holistic approach is required to account for medical, individual, social and environmental influences.

14. Addressing the needs of people with neurological conditions begins with increasing understanding and awareness and addressing stigma and discrimination, which impact well-being and act as barriers to seeking health care. Rather than adopting a disease-specific structure, the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 uses an integrated, person-centred framework for the prevention, diagnosis, treatment and care of people with neurological disorders. The prevention of neurological disorders rests upon the promotion and development of optimal brain health across the life course. Good brain health is a state in which every individual can learn, realize their potential and optimize their cognitive, psychological, neurophysiological and behavioural responses, while adapting to changing environments.

15. Other relevant areas or disciplines of public health are closely intertwined with and impact neurological disorders, such as mental health, violence, injuries, noncommunicable and infectious diseases, and environmental health. Many neurological conditions are woven into other WHO strategies, action plans or World Health Assembly resolutions. In addition, neurological disorders have strategic links to health systems and UHC, including the full range of essential health services, from health promotion to prevention, treatment, rehabilitation and palliative care. The intersectoral global action

¹ ATLAS Country Resources for Neurological Disorders , second edition. Geneva: World Health Organization; 2017.

² Abdullahi A, Candan SA, Abba MA, et al. Neurological and musculoskeletal features of COVID-19: a systematic review and meta-analysis. *Front. Neurol.* 2020; 11:687. doi: 10.3389/fneur.2020.00687.

plan on epilepsy and other neurological disorders 2022–2031 is consistent with the 2030 Agenda and the SDGs and takes a life course approach, recognizing that there are strong linkages between maternal, newborn, child and adolescent health, reproductive health and ageing, and brain health and neurological disorders.

16. Linking the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 with other global commitments reflects WHO’s responsiveness to focusing on the impact on people’s health and working in a cohesive and integrated manner).

17. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 provides the vision, goal, guiding principles and strategic objectives with their action areas and targets. It suggests a range of proposed actions for Member States, the WHO Secretariat and international and national partners. While targets are defined for achievement globally, each Member State can be guided by these to set its own national targets, taking into account national circumstances and challenges.

VISION

18. The vision of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 is a world in which:

- brain health is valued, promoted and protected across the life course;
- neurological disorders are prevented, diagnosed and treated, and premature mortality and morbidity are avoided; and
- people affected by neurological disorders and their carers attain the highest possible level of health, with equal rights, opportunities, respect and autonomy.

GOAL

19. The goal of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 is to reduce the stigma, impact and burden of neurological disorders, including their associated mortality, morbidity and disability, and to improve the quality of life of people with neurological disorders, their carers and families.

20. In order to achieve the vision and goal defined above, the prevention, treatment and care of epilepsy and other neurological disorders should be strengthened, wherever possible, utilizing entry points and synergies to achieve the best results for all.

STRATEGIC OBJECTIVES

21. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 has the following strategic objectives:

- raise policy prioritization and strengthen governance;
- provide effective, timely and responsive diagnosis, treatment and care;
- implement strategies for promotion and prevention;

- foster research and innovation and strengthen information systems; and
- strengthen the public health approach to epilepsy.

GUIDING PRINCIPLES

22. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 relies on the following six guiding principles.

(a) People-centred PHC and UHC

All people with neurological disorders and their families should participate in and have equitable access, without discrimination or risk of financial hardship, to a broad range of promotive, preventive, diagnostic, treatment, rehabilitation, palliative and social care, as well as to essential, effective, safe, affordable and quality medicines and other health products.

(b) Integrated approach to care across the life course

Integrated care for neurological disorders is essential for achieving better promotion, prevention and management outcomes. This is particularly important given the multimorbidity of neurological disorders with one another and with other health conditions, which are often linked by common preventable risk factors. Care for neurological disorders requires close alignment to other existing services and programmes, in line with the Framework on Integrated, People-centred Health Services,¹ as well as consideration of the health and social care needs at all stages of the life course.

(c) Evidence-informed policy and practice

Scientific evidence and/or best practices enable the development of public health policies and interventions for the prevention and management of neurological disorders that are cost-effective, sustainable and affordable. This includes existing knowledge, real-world, practice-based evidence, the preferences of people with neurological disorders and culture-based experience, as well as the translation of new evidence into policy and practice that work towards finding disease-modifying treatments or cures, effective prevention and innovative models of care.

(d) Intersectoral action

A comprehensive and coordinated response to neurological disorders requires partnerships and collaboration among all stakeholders. Achieving such collaboration requires leadership at governmental levels; clear delineation of roles and responsibilities among stakeholders; innovative coordination mechanisms, including public–private partnerships; engagement of all relevant sectors, such as health, social services, education, environment, finance, employment, justice and housing; and partnerships with civil society, academia, private sector actors and associations representing those with neurological disorders.

(e) Empowerment and involvement of persons with neurological disorders and their carers

The social, economic and educational needs and freedoms of persons and families affected by neurological disorders should be promoted, prioritized and protected. People with neurological

¹ See document A69/39; see also Framework on integrated people-centred health services (IPCHS) (https://www.who.int/servicedeliverysafety/areas/people-centred-care/Framework_Q-A.pdf?ua=1, accessed 1 December 2021).

disorders, their carers, local communities and organizations that represent them should be empowered through engagement and consultative mechanisms in care planning and service delivery as well as in policy and legislation development, programme implementation, advocacy, research, monitoring and evaluation.

(f) Gender, equity and human rights

Mainstreaming a gender perspective on a system-wide basis in all efforts to implement public health responses to neurological disorders is central to creating inclusive, equitable and healthy societies. Universal access to interventions for people with neurological disorders and their carers, as well as a focus on reaching the most vulnerable population groups, including migrants, children, women, older people, those living in poverty and those in emergency settings, are crucial to realizing the rights of people with neurological disorders and reducing stigma and discrimination. The implementation of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 must explicitly address disparities specific to each national context and reduce inequalities.

STRATEGIC OBJECTIVE 1: RAISE POLICY PRIORITIZATION AND STRENGTHEN GOVERNANCE

23. A broad public health approach grounded in principles of UHC and human rights is needed to improve the care and quality of life of people with neurological disorders. To achieve this, strengthening governance for neurological disorders involves ensuring that strategic policy frameworks are established and supported by effective oversight, regulatory and accountability mechanisms.
24. Lack of knowledge and awareness need to be addressed at all levels of society, including among government representatives, people with neurological disorders and other stakeholders, in order to change the major structural and attitudinal barriers to achieving positive brain health outcomes, reduce stigma and discrimination, promote the human rights of people with neurological disorders and improve their care and quality of life.
25. Effective advocacy can influence political commitment and mobilize resources to support policy prioritization of neurological disorders, including interlinkages with achieving broader international commitments such as those outlined in the 2030 Agenda and the SDGs and the Convention on the Rights of Persons with Disabilities.
26. The integration and mainstreaming of neurological disorders in relevant evidence-informed national policies, legislation and guidelines within and beyond the health sector, including in education, social protection and employment, is important to meet the multifaceted needs of people with neurological disorders.
27. Health financing is a core function of health systems that can enable progress towards achieving UHC. It involves designing and implementing policies to ensure effective health system governance and service arrangements, including through raising revenue, pooling funds and purchasing services (such as the allocation of resources to health service providers) in order to support access to timely, affordable, resilient and quality services, support and treatment for neurological disorders.

Global targets for strategic objective 1

Global target 1.1

75% of countries will have adapted or updated existing national policies, strategies, plans or frameworks to include neurological disorders by 2031.

Global target 1.2

100% of countries will have at least one functioning awareness campaign or advocacy programme for neurological disorders by 2031.

1.1 Advocacy

28. Advocacy represents the first step in raising awareness and better public understanding of brain health and neurological disorders. It is necessary to improve neurological care, reduce stigma and discrimination, prevent violations and promote human rights. Advocacy also includes public and political awareness of the burden and impact of neurological disorders and the dissemination of evidence-based interventions, including the promotion of brain health and the prevention and treatment of neurological disorders.

29. Effective advocacy, including public awareness campaigns, requires tailoring approaches to reflect each country's cultural and social context. In addition, it requires involving people with neurological disorders in the centre of all advocacy efforts to achieve desired health and social outcomes. Public awareness campaigns should include information on the promotion and prevention of neurological disorders and should be designed for people living with neurological disorders.

30. Proposed actions for Member States

(a) Engage all relevant stakeholders, such as advocacy experts, health professionals and people with neurological disorders and their carers, to develop awareness-raising programmes to improve the understanding of neurological disorders, promote brain health and prevent and manage neurological conditions across the life course, including the identification of barriers to health seeking behaviours.

(b) Establish national and regional collaboration, knowledge translation and exchange mechanisms to raise awareness of the burden of disease associated with neurological disorders and the availability of and access to appropriate evidence-based promotive, preventive, management and care services for people with neurological disorders.

(c) Lead and coordinate intersectoral advocacy strategies for reducing stigma and discrimination and promoting the human rights of people with neurological disorders across the life course, including vulnerable groups. Integrate these within broader health promotion strategies, such as flexible educational and work environments for people with neurological disorders.

31. Actions for the Secretariat

(a) Engage and include people with neurological disorders, their carers and families in decision-making within WHO's own processes on issues that concern them, through meaningful and structured mechanisms.

(b) Provide technical support and advocacy tools for stigma reduction to help policymakers at national, regional and global levels to recognize the need to prioritise neurological disorders and integrate them into policies and plans.

(c) Provide support and guidance to Member States in meaningfully engaging people with neurological disorders across all age groups by providing a convening platform, generating and leveraging evidence-based information and best practices, and engaging lived experience in decision-making processes.

32. **Proposed actions for international and national partners**

(a) In partnership with other stakeholders, advocate for increasing the visibility of neurological disorders in the SDGs and other global commitments, as well as for prioritizing neurological disorders in policy agendas by raising awareness of the social and economic impacts of neurological disorders and the need for an integrated response across the life course and within health care systems.

(b) Support advocacy efforts for protecting the human rights of people with neurological disorders, redressing inequities in access to neurological services for vulnerable populations and reducing stigma and discrimination. Ensure that people with neurological disorders are equally included in activities of the wider community in order to foster cultural, social and civic participation and enhance autonomy.

(c) Provide a platform for dialogue between associations and organizations of people with neurological disorders and their carers, health and social workers, government sectors and other relevant actors at international, regional and national levels, while including young people and older people and ensuring gender-balanced representation. Engage with different sectors, such as the transportation, education, judicial, financial and employment sectors, in advocacy efforts for increasing the independence and autonomy of people with neurological disorders.

1.2 **Policy, plans and legislation**

33. The development of comprehensive intersectoral policies, plans and legislation based on scientific evidence and aligned with international human rights standards strengthens governance for neurological disorders and ensures that the complex needs of people with neurological disorders are addressed within the context of each country.

34. Collaboration between people with neurological disorders, technical experts who generate evidence, policymakers and programme managers who formulate, adapt and implement policies, plans, guidelines and legislation, as well as health professionals who provide care and services to people with neurological disorders, is essential to facilitate the development and implementation of evidence-based policies and plans across sectors.

35. Given the interlinkages between neurological disorders and other public health areas, numerous opportunities exist to integrate neurological disorders into policies and plans for these disciplines, for instance in the areas of noncommunicable and communicable diseases, mental health, maternal, children and adolescent health, ageing and disability.

36. Legislation that impacts the lives of people with neurological disorders, for example people with epilepsy, is frequently outdated and fails to protect and promote their human rights. It is crucial to update

all laws relevant to persons with neurological disorders, such as those related to education, employment and women's rights, and ensure that they are more inclusive.

37. **Proposed actions for Member States**

(a) Develop or review, update, strengthen and implement national and/or subnational policies, plans and legislation based on context-specific evidence relating to neurological disorders, whether as separate instruments or by integrating them into other planned intersectoral actions for NCDs, mental health, disability and other relevant areas across the care continuum of all ages. Formulate and implement national policies and legislation in consultation with people with neurological disorders, their carers and other stakeholders in order to promote and protect their rights and prevent stigma and discrimination.

(b) Establish monitoring and accountability mechanisms for resource allocation, including focal points, units or functional divisions responsible for neurological disorders within the health ministry (or equivalent body).

(c) Review disability and other relevant policies and laws to be more inclusive of people with neurological disorders, including by reviewing criteria to access disability benefits; providing funding to support people with disabilities in employment; establishing quota systems for active hiring; making working environments more accessible with employment regulations and labour laws that govern the public and private sectors; and strengthening mechanisms to address claims and complaints related to human rights violations and discrimination against people with neurological disorders through impartial recourse processes.

38. **Actions for the Secretariat:** Offer technical support, tools and guidance to Member States and policymakers to:

(a) share knowledge and evidence-based best practices to inform the development, strengthening, implementation and evaluation of national and/or subnational policies, plans and legislation that are aligned with international human rights standards for an integrated, intersectoral response to neurological disorders;

(b) strengthen accountability mechanisms and strategies for resolving claims and complaints to address human rights violations and discrimination that are related to people with neurological disorders, for example in employment, access to education, driving, fertility and women's rights;

(c) adopt legislation to ensure universal access to financial, social and disability benefits for people with neurological disorders and their carers;

(d) provide assistance in outlining mechanisms that proactively encourage and support the active participation of people with neurological disorders in all aspects of policy-making, planning and financing services; and

(e) provide ongoing monitoring, guidance and technical support to Member States in implementing the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031, with the help of WHO regional and country offices across all levels.

39. Proposed actions for international and national partners

- (a) Actively engage stakeholders across sectors to inform the development and implementation of evidence-based policies, plans and legislation, paying explicit attention to the human rights of people with neurological disorders and their carers and preventing stigma and discrimination.
- (b) Support the creation and strengthening of associations and organizations of people with neurological disorders, their families and carers, and foster their collaboration with other organizations as partners in the implementation of policies for neurological disorders.
- (c) Facilitate knowledge exchange and dialogue among associations of people with neurological disorders, their carers and families and their organizations, as well as health and social workers and governments, to ensure that Convention on the Rights of Persons with Disabilities principles such as empowerment, engagement and inclusion are embedded in legislation in order to promote the health of people with disabilities that are associated with neurological disorders.

1.3 Financing

40. Neurological disorders lead to increased costs for governments, communities, families and individuals, as well as productivity losses for economies, many of which could be remedied by prevention, early detection and timely treatment. People with neurological disorders and their families face significant financial hardship due to health and social care costs, as well as reduced or forgone income. This is compounded by a lack of universal health insurance across all countries, with limited investment and resources to address neurological conditions.

41. Appropriately funded policies and programmes are required in order to ensure access to prevention, diagnosis, treatment and care for people with neurological disorders and their carers and reduce the financial impact of out-of-pocket health and social care costs. This investment will be offset by a reduction in the cost of neurological disability and will ultimately reduce long-term costs for governments.

42. Proposed actions for Member States

- (a) Support sustainable funding for policies, plans and programmes for the prevention and management of neurological disorders, based on an integrated response across the life course, through dedicated domestic budgetary allocations, efficient and rational utilization of resources, voluntary innovative financing mechanisms and other means, including multilateral, bilateral, pooled funding and public–private partnerships.
- (b) Produce and/or utilize the most recent data on the epidemiological and economic burden of neurological disorders, as well as the economic evidence base for investment and the projected costs of intervention scale-up in order to make informed decisions on budgets that are proportionate to the scale of the burden in the country and to allocate scarce resources optimally.
- (c) Develop financial and social protection mechanisms, including national health insurance plans and social security benefits, for addressing the direct and indirect costs related to accessing health care (such as transportation costs) and support affordable and accessible care for persons with neurological conditions, their carers and families.

43. Actions for the Secretariat

- (a) Promote collaboration and knowledge exchange at international, regional, and national levels to strengthen knowledge on the socioeconomic impact of investment for neurological disorders.
- (b) Offer technical support, tools and guidance to Member States in strengthening their national capacity to engage in intersectoral resource planning, budgeting and expenditure monitoring on neurological disorders.
- (c) Provide guidance for structured approaches to generating national investment for neurological disorders and brain health promotion, care and protection, in line with other existing investment case methods for supporting governments' choices.

44. Proposed actions for international and national partners

- (a) Support Member States in mobilizing sustainable financial resources and identifying functional gaps in resource allocation in order to support the implementation, monitoring and evaluation of national and/or subnational policies, programmes and services for neurological disorders.
- (b) Support the participation of people with neurological disorders and their carers in decision-making processes related to international financing mechanisms.
- (c) Support the development of innovative funding models, such as an international assistance fund to subsidize and fund the costs of diagnostics and therapeutics and offset the costs associated with referral, for example for travel and specialist services and interventions.
- (d) Support the accountability and efficiency of resource use in health care systems in order to allocate scarce resources optimally and improve quality and efficiency with minimum wastage of resources.

STRATEGIC OBJECTIVE 2: PROVIDE EFFECTIVE, TIMELY AND RESPONSIVE DIAGNOSIS, TREATMENT AND CARE

45. Neurological disorders are important causes of mortality, morbidity and disability. They require concerted intersectoral efforts to address the needs of people at risk of, or living with, neurological disorders by providing them with equitable access to effective health care and community-based, social, educational and vocational interventions and services.

46. Integrating care for neurological disorders into primary, secondary and tertiary health care levels and providing essential medicines, diagnostics, training and support for health care workers, carers and families of people with neurological disorders are actions consistent with the principles of UHC, the 2030 Agenda and the SDGs.

47. A strong health system that embraces a people-centred and coordinated care approach and is directed towards ensuring effective, timely and responsive diagnosis, treatment and care over sustained periods is needed to improve the well-being and quality of life of people with neurological disorders, as well as to avoid complications, reduce hospitalization and costly interventions and prevent premature death and disability.

Global targets for strategic objective 2

Global target 2.1

75% of countries will have included neurological disorders in the UHC benefits package by 2031.

Global target 2.2

80% of countries will provide the essential medicines and basic technologies required to manage neurological disorders in primary care by 2031.

2.1 Care pathways

48. Developing interdisciplinary care for people with neurological disorders requires guidelines that are grounded in evidence-based protocols and practices, organization by stages of care and a life course approach.

49. Services and care pathways, including access to quality emergency care, should be responsive to the needs of people with neurological disorders, their carers and families, who live in both urban and rural areas, and should be inclusive of vulnerable population groups, including socioeconomically disadvantaged individuals, children, older people, people affected by domestic and gender-based violence, prisoners, refugees, displaced populations and migrants, indigenous populations and other groups specific to each national context.

50. A care pathway should be oriented to each stage of the life course, from pregnancy through early childhood to care for older adults. This includes continuing care for children and adolescents with neurological disorders as they adapt to the challenges of transitioning into adulthood.

51. Neurological conditions impact people's functioning and often reduce their mobility, communication, cognitive functioning and self-care, which requires rehabilitation. However, the rehabilitation needs for people with neurological disorders are largely unmet, with only 16% of countries reporting specialized neurorehabilitation services and only 17% reporting general rehabilitation units that offer neurorehabilitation.¹

52. Due to the complex needs and high levels of dependency and morbidity of people with neurological disorders, a range of coordinated health and social care is essential, including interventions such as palliative care to provide relief from pain; psychosocial, spiritual and advance care planning support; and interventions to enhance their quality of life.

53. When possible, care pathways should include neurosurgical facilities for the surgical procedures required for the care of neurological conditions such as tumours, epilepsy and acute ischaemic stroke.

54. Continuity of care can be optimized using digital health solutions that foster greater information-sharing between providers, people with neurological disorder and their carers and allow for remote consultation through tele-health.

¹ ATLAS Country Resources for Neurological Disorders , second edition. Geneva: World Health Organization; 2017.

55. Proposed actions for Member States

(a) Develop evidence-based pathways of coordinated health and social services for people with neurological disorders across the life course within UHC in order to enable their access to quality care, when and where required. This includes integration at multiple levels of the health and social care system, use of interdisciplinary care teams, service directories and medical health records, and referral mechanisms. In particular:

- enhance equitable access to quality care for acute (emergency) and chronic neurological conditions;
- strengthen care at primary, secondary and tertiary levels, including medical and surgical facilities;
- develop community-based neurological services, with the involvement of other care providers such as traditional healers, and promote self-care; and
- promote continuity of care between providers and health system levels, including through referral and follow-up, ensuring that primary care services are supported by specialist services in hospitals and community health services with efficient referral and back-referral mechanisms.

(b) Develop strategies to rationalize resources and enhance effective collaboration across public, private and nongovernmental actors through:

- the implementation of context-specific, innovative and integrated models of care, from diagnosis to end-of-life across health and social sectors;
- the promotion, implementation and scaling up of digital health solutions and technologies across health and social care; and
- the creation of interdisciplinary health and social care teams and networks and the capacity-building of health and social care professionals.

(c) Review existing related services, such as those on mental health, maternal, newborn, child and adolescent health, immunization and other relevant communicable and NCD programmes in order to identify opportunities for the integration of prevention, early diagnosis and the management of neurological disorders and non-neurological comorbidities.

(d) Promote equitable access to rehabilitation for disabilities associated with neurological conditions by strengthening health systems at all levels, from specialized inpatient settings through to community-delivered rehabilitation.

(e) Develop new and/or strengthen existing services, guidance and protocols to support the implementation of early palliative care coordination and referral mechanisms, while also ensuring equitable access to palliative care for people with neurological disorders.

(f) Proactively identify and provide appropriate care and support to population groups at particular risk for neurological disorders or who have poor access to services, such as socioeconomically disadvantaged individuals, older people and other groups specific to each national context, and promote the continuity of integrated care between paediatric and adult providers for adolescents with neurological disorders as they transition into adulthood.

(g) In partnership with humanitarian actors, integrate support needs into emergency preparedness plans in order to enable access to safe and supportive services for people with pre-existing or emergency-induced neurological disorders such as traumatic injuries.

(h) Empower people with neurological disorders and their carers to participate in service planning and delivery and enable them to make informed choices and decisions about care that meets their needs by providing evidence-based, accessible information, including on pathways from detection and diagnosis to treatment (including self-care) and care access.

56. **Actions for the Secretariat**

(a) Provide guidance and technical support to Member States in integrating cost-effective interventions for neurological disorders, their risk factors and comorbidities into health systems and UHC benefit packages.

(b) Provide technical support to Member States in documenting and sharing best practices of evidence-based standards of care across the life course, including service delivery and interdisciplinary care coordination, emphasizing prevention, diagnosis, treatment, rehabilitation and palliative care for people with neurological disorders.

(c) Offer technical assistance and policy guidance to support emergency preparedness and enable access to safe, supportive services for those with neurological conditions.

57. **Proposed actions for international and national partners**

(a) Actively engage all relevant stakeholders across sectors, including people with neurological disorders, their carers and families, in order to inform the development and implementation of intersectoral and interdisciplinary care coordination and integrated neurological care pathways across the continuum, including prevention, diagnosis, treatment, rehabilitation and palliative care.

(b) Facilitate knowledge exchange and dialogue to review and update health service strengthening efforts following humanitarian emergencies, in collaboration with relevant multilateral and regional agencies, organizations representing people with neurological disorders and other civil society organizations.

(c) Generate evidence and develop tools to support programmes for providing access to integrated care for people with neurological disorders.

(d) Facilitate initiatives, in partnership with relevant stakeholders, to support and encourage people with neurological disorders, their families and carers to access neurological care and services through evidence-based, user-friendly, technology-supported information and training

tools such as iSupport¹ and/or by establishing national helplines and websites with accessible information.

2.2 Medicines, diagnostics and other health products

58. Medicines, diagnostics and other health products, such as assistive technology, biological products, and cell and gene therapy, are essential for prevention, early diagnosis and treatment to reduce mortality and morbidity and improve the quality of life of people with neurological disorders.

59. Essential medicines have a crucial role for both the prevention and treatment of neurological disorders. For example, medicines for multiple sclerosis exist that slow disease progression and improve the quality of life for many people, but their availability and affordability are limited in low- and middle-income countries.

60. The use of medical devices, including imaging and in vitro diagnostics (e.g., neuroimaging, lumbar puncture and microscopy) can reduce morbidity through early detection and by slowing disease progression. Even when effective diagnostic tools are available, they may not be affordable or accessible due to the limited availability of laboratory infrastructure, equipment and trained personnel.

61. Assistive technology enables people to live healthy, productive, independent and dignified lives and reduce the need for formal health and support services, long-term care and the work of carers. Few people in need have access to assistive products due to high costs, lack of awareness, availability, trained personnel, policy and financing. To increase access to assistive products for those who need them the most, they should be available at all levels of health services, especially primary care, and within UHC.

62. The rapid production of new medications and molecules in certain neurological disorders is a model for other neurological or health conditions. Current obstacles to accessing treatment and affordability should be identified in order to pave the way and remove barriers to make future and upcoming medications for neurological conditions available and affordable.

63. Proposed actions for Member States

(a) Promote the inclusion, updating and availability of essential, effective, safe, affordable and quality medicines and health products for neurological disorders in national essential medicines lists, as guided by the WHO Model List of Essential Medicines, the WHO List of Priority Medical Devices for Management of Cardiovascular Diseases and Diabetes, the WHO List of Priority Medical Devices for Cancer Management and the WHO Priority Assistive Products List, while including access to controlled medicines and minimizing the risk of misuse. Identify key barriers to access across population groups (including in emergency settings) and strategies to systematically address these.

(b) Promote the appropriate, transparent and sustainable use of essential medicines for the prevention and management of neurological disorders through measures such as quality assurance, preferential registration procedures, generic and biosimilar substitution, the use of international nonproprietary names and financial incentives, where appropriate. Optimize the training of health professionals, people with neurological disorders and their carers, including by

¹ iSupport for Dementia. Training and support manual for carers of people with dementia. Geneva: World Health Organization; 2019.

using evidence-based strategies to address the treatment of comorbidities, adverse events and drug interactions such as those due to polypharmacy.

(c) Enable the availability, access and use of appropriate relevant diagnostics as guided by the WHO Model List of Essential In Vitro Diagnostics, such as microscopy, electrophysiology, genetic testing and neuroimaging technology, for example computed tomography (CT) and magnetic resonance imaging (MRI). Improve infrastructure and train technicians and health care workers in the use of these technologies.

(d) Establish transparent regulatory frameworks, resources and capacity to ensure that quality, safety and ethical standards are met for health products and diagnostics such as biotherapeutic treatments, genetic testing, pre-implantation genetic testing and assistive products like hearing aids, wheelchairs and prostheses.

(e) Improve the availability of life-saving medicines and health products for managing neurological disorders during humanitarian emergencies.

64. Actions for the Secretariat

(a) Accelerate action and offer technical support to Member States to increase equitable access to medicines, diagnostics and other health products for people with neurological disorders, including through the setting of norms and standards at a global level; evidence-based, context-specific regulatory guidance; good practices for standards-based procurement and manufacturing; and technical, legislative and regulatory training.

(b) Update the WHO Model List of Essential Medicines, the WHO Model List of Essential In Vitro Diagnostics, the WHO Lists of Priority Medical Devices, the WHO Priority Assistive Products List and other relevant documents to ensure that they are appropriate for neurological conditions and that pathways are in place for the timely implementation and use of effective treatments and diagnostics.

65. Proposed actions for international and national partners

(a) Encourage all relevant stakeholders to engage in activities to promote efforts for improving access to affordable, safe, effective and quality medicines, diagnostics and other health products, such as neuroimaging.

(b) Support the global, regional, intergovernmental, national and/or subnational strengthening of regulatory and procurement processes (including through pooled procurement, innovative health financing mechanisms and human resource capacity-building) in order to promote access to and appropriate use of medicines, diagnostics and other health products.

(c) Encourage the involvement of people with neurological disorders and their carers in research, development and implementation processes for new medicines, diagnostics and other health products.

2.3 Health workers' capacity-building, training and support

66. Achieving improved health outcomes depends greatly on the combination of an adequate neurological workforce (e.g., adult neurologists, child neurologists, neurosurgeons); other health care

providers, including but not limited to psychologists, psychiatrists, radiologists, physical therapists, occupational therapists and speech therapists; and competent health workers serving at the PHC level who are trained in identifying and managing neurological disorders.

67. The training and education of an interdisciplinary workforce, including social care workers, rehabilitation specialists trained in neurological conditions, technicians (electrophysiological, imaging, laboratory), pharmacists, biomedical engineers, community health workers, family, carers and traditional healers, where appropriate, is required to support the delivery of person-centred care to people with neurological disorders, reduce their mortality and morbidity and improve their quality of life.

68. Proposed actions for Member States

(a) Identify and apply context-appropriate evidence in order to establish:

- appropriately resourced programmes and policies to address projected health workforce needs for the future in light of demographic changes, increasing ageing populations and the prevalence of diseases such as dementia, stroke and Parkinson’s disease; and
- adequate compensation and incentives for health and social care workers trained in neurological disorders to work in underserved areas and to promote the retention of workers in those areas.

(b) Strengthen health and social care workforce capacity to rapidly identify and address neurological disorders, including common comorbid and treatable conditions such as infectious diseases, hypoxic ischaemic perinatal brain injury, hypothyroidism, cataracts and NCDs. These initiatives should focus on the enhanced capacity of the existing workforce, both specialist and generalist, including relevant associate health professionals, as appropriate to their roles, and should include:

- implementing various modes of training programmes (e.g., mental health gap action programme (mhGAP) e-learning course) for general and specialized health and social care workers to deliver evidence-based, culturally appropriate and human rights-oriented neurological care, including by addressing stigma and discrimination for all people across the life course;
- developing career tracks for the neurological workforce by strengthening postgraduate training and working in partnership with medical societies to raise awareness of the appeal of working in brain health;
- expanding existing educational curricula and providing continuing education on the care of people with neurological disorders;
- expanding the role of the neurological workforce to encompass the supervision and support of general health workers in providing neurological interventions;
- harnessing the potential of community health workers and strengthening collaboration with other informal care providers, such as traditional healers, with effective training, support and supervision; and

- ensuring that people with neurological disorders are involved in the planning, development and delivery of training, as appropriate.

(c) Support health and social care workers to implement and scale-up services using information and communication technologies such as telemedicine and internet/mobile phone technologies in order to expand neurological care to remote and low-resource settings and support home-based services.

69. **Actions for the Secretariat**

(a) Support Member States with adequate tools to incorporate neurological care needs into routine planning for health workers, based on the monitoring and collection of the best available data and following a health labour market approach. Planning considerations should include the identification of service gaps, neurological care training requirements and core competencies for health and social workers in the field, as well as advanced neurological care training.

(b) Support Member States in building health and social care workforce capacity, including informal care providers, by promoting, strengthening and developing guidance and tools and the application of the competency-based training models required for the diagnosis, treatment and care of neurological disorders.

70. **Proposed actions for international and national partners**

(a) Facilitate the exchange of information on best practices and the dissemination of findings in health workers' development and training in order to support national efforts related to the prevention, management and care of people with neurological disorders.

(b) Support the implementation of capacity-building programmes, including training and education, for general and specialized health care workers to identify neurological disorders and provide evidence-based interventions to promote diagnosis, treatment and care for neurological disorders.

(c) Support national authorities in the development of appropriate health care infrastructure and institutional capacity for the training of health personnel in order to strengthen health systems and expand quality services.

2.4 **Carer support**

71. Neurological disorders have a profound impact on individuals, families and communities. Due to their chronic course, people with neurological disorders often require ongoing care that is provided in large part by informal carer providers.

72. Carers can be defined by their relationship to the person with a neurological condition and their care input. Many carers are relatives, but close friends or volunteers can also take on caregiving responsibilities. Carers provide “hands-on” care and support for people with neurological disorders and play a significant role in organizing lifelong care.

73. Challenges for carers include stress, role strain, financial burden, social isolation and bereavement in the event of loss. Roles and challenges may vary depending on the age of the carer and are also different when caring for children, adolescents or older adults.

74. Caring for a person with a neurological disorder may affect the carer's own health, well-being and social relationships. The global action plan on the public health response to dementia identifies key actions to support carers that are also relevant to other neurological conditions.

75. Proposed actions for Member States

(a) Develop mechanisms to involve people with neurological disorders and their carers into care planning, policy-making and legal review and remove barriers to enable their participation, while paying attention to the wishes and preferences of people with neurological disorders and their families.

(b) Provide accessible and evidence-based information on available resources in the community, such as training programmes, respite care, mental health services and other resources that are tailored to the needs of carers of people with neurological disorders.

(c) Within the context of community-based neurological care, provide training programmes, in collaboration with relevant stakeholders, for health and social care staff in the identification and reduction of carer stress.

(d) Develop or strengthen mechanisms to protect carers, such as through the implementation of social and financial benefits (e.g., pension, leave or flexible work hours) and policies and legislation aimed at reducing stigma and discrimination and supporting carers beyond their caregiving role.

76. Actions for the Secretariat

(a) Support Member States in developing and evaluating evidence-based information, data, training programmes and respite services for carers of people with neurological disorders through an intersectoral approach that is in line with the Convention on the Rights of Persons with Disabilities.

(b) Facilitate access to affordable, evidence-based resources for carers of people with neurological disorders in order to improve knowledge and skills related to neurological disorders, reduce emotional stress and improve coping, self-efficacy and health, using resources such as WHO's mhGap, iSupport, mDementia,¹ the Caregivers Skills Training Programme for Children with Developmental Disorders or Delays and other education, skills training and social support resources.

77. Proposed actions for international and national partners

(a) Increase awareness of the impact of caring for people with neurological disorders, including the need to protect carers from discrimination, support their ability to continue to provide care throughout the disease progression and promote their self-advocacy.

(b) Assist in implementing culturally sensitive, context-specific and person-centred training programmes for carers and families in order to promote well-being and enhance knowledge and

¹ Be Healthy Be Mobile. A handbook on how to implement mDiabetes. Geneva: World Health Organization; 2016.

caregiving skills throughout the progression of neurological disorders, starting with existing resources such as WHO's iSupport and mhGAP.

STRATEGIC OBJECTIVE 3: IMPLEMENT STRATEGIES FOR PROMOTION AND PREVENTION

78. The promotion of brain health and the prevention of neurological disorders involves reducing modifiable risk factors and enhancing protective factors, including during critical periods of brain development.

79. Promoting optimal brain development across the life course starts with preconception, pregnancy, childhood and adolescence, is linked to healthy ageing and encourages healthy behaviour, adequate nutrition, infectious disease control, prevention of head and spinal trauma and reducing exposure to violence and environmental pollutants.

80. UHC represents a key component for promoting brain health and well-being. An important element includes addressing social and economic determinants through a coordinated intersectoral response in a gender-sensitive manner. Collaboration with local populations, including indigenous people, should be undertaken to explore culturally appropriate ways of preventing neurological disorders that respect local customs and values.

81. Incorporating a One Health¹ approach for neurological disorders to design and implement programmes, policies, legislation and research, with communication between multiple sectors, public health, animal and plant health and the environment will contribute towards achieving better health outcomes by preventing neurological disorders.

Global targets for strategic objective 3

Global target 3.1

80% of countries will have at least one functioning intersectoral programme for brain health promotion and the prevention of neurological disorders across the life course by 2031.

Global target 3.2

The global targets relevant for prevention of neurological disorders are achieved, as defined in:

- the NCD-GAP;
- Defeating meningitis by 2030: a global road map; and
- Every newborn: an action plan to end preventable deaths.

3.1 Promoting healthy behaviour across the life course

82. Promoting and emphasizing brain health across the life course includes focusing on healthy behaviour. There are strong interrelationships between several neurological disorders, such as dementia and stroke, with NCDs such as hypertension, diabetes, obesity and other related disorders, as well as

¹ One Health. Q&A. Geneva: World Health Organization; 2017 (<https://www.who.int/news-room/q-a-detail/one-health>, accessed 1 December 2021).

with behavioural risk factors such as physical inactivity, unbalanced diets, tobacco use and the harmful use of alcohol.

83. An understanding of the risk factors contributing to the neurological burden of disease can inform preventive measures and lead to the development of better disease-modifying strategies.

84. Smoking is a behavioural risk factor associated with neurological disorders such as stroke, dementia and multiple sclerosis. Second-hand tobacco smoke was estimated to account for 4% of the global stroke burden in 2010.¹

85. The harmful use of alcohol, such as heavy alcohol consumption, can directly affect the nervous system and result in neurological disorders such as cerebellar degeneration, neuropathy, myopathy, delirium tremens and thiamine deficiency leading to Wernicke encephalopathy or Korsakoff syndrome. It also contributes to road traffic crashes, violence, falls and associated brain and spinal cord injuries.

86. Good sleep hygiene is necessary for children's and adults' overall health and well-being. Irregular sleep can be a risk factor for certain neurological disorders and people with neurological disorders often experience sleep disturbances as a consequence of their underlying disorder.²

87. Behavioural risk-factor modification can strengthen the capacity to make healthier choices and follow healthy behaviour patterns that foster good brain health and reduce the burden of neurological disorders. For example, exercise and regular physical activity are associated with social, mental and brain health benefits and a better quality of life, improved functioning and lower caregiver burden in people with chronic neurological disorders such as Parkinson's disease.

88. **Proposed actions for Member States**

(a) Support actions that have been shown to reduce the risk of neurological disorders across the life course by advancing strategies for healthy behaviours, such as promoting the cessation of tobacco use and excessive alcohol intake, vaccination and increasing physical activity, in line with the NCD-GAP, the global strategy to reduce the harmful use of alcohol, the WHO Guidelines on physical activity and sedentary behaviour and the WHO Guidelines on risk reduction of cognitive decline and dementia. These actions should be undertaken in collaboration with people with neurological disorders, their carers and other relevant stakeholders.

(b) Develop, implement and monitor appropriately resourced, population-wide strategies that promote healthy nutrition and diet, as outlined in the WHO's comprehensive implementation plan on maternal, infant and young child nutrition, the NCD-GAP and the 2030 Agenda.

(c) Encourage urban planning that improves access to sport, education, transport and physical activity in leisure/recreation in order to promote activity and provide alternatives to a sedentary lifestyle.

¹ Prüss-Üstün A, Wolf J, Corvalán CF., Bos R, Neira MP. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. 2016; World Health Organization.

² Worldwide Project on Sleep and Health. Project Overview. Geneva: World Health Organization; 2018.

89. Actions for the Secretariat

- (a) Provide technical support and strengthen global, regional and national capacities and capabilities to:
- raise awareness of the links between neurological disorders and other NCDs; and
 - implement strategies for the reduction and control of modifiable risk factors for neurological disorders by developing evidence-based guidelines for cost-effective, coordinated health care interventions and integrating relevant WHO guidelines into national health planning processes and development agendas.
- (b) Strengthen, share and disseminate evidence to support policy interventions for reducing potentially modifiable risk factors for neurological conditions by promoting healthy workplaces, health-promoting schools and other educational institutions, healthy cities initiatives, health-sensitive urban development and social and environmental protection.

90. Proposed actions for international and national partners

- (a) Promote and mainstream population brain health strategies that are age-inclusive, gender-sensitive and equity-based at national, regional and international levels in order to support healthy behaviour for people with neurological disorders, their carers and families.
- (b) Facilitate knowledge exchange on evidence-based best practices to support actions that have been shown to reduce the risk of neurological disorders across the life course, in line with WHO's Framework Convention on Tobacco Control, the global strategy to reduce harmful use of alcohol, the global strategy on diet, physical activity and health and other relevant strategies.

3.2 Infectious disease control

91. The neurological consequences of infectious diseases such as meningitis, encephalitis, neurocysticercosis, malaria, HIV, toxoplasmosis, polio, enterovirus, syphilis and rabies contribute to global morbidity and mortality, especially among the most vulnerable, marginalized populations and can result in lifelong consequences (e.g., vision and hearing loss, developmental delay, cognitive or motor impairment) that necessitate specialized follow-up care, including rehabilitation. Yet, many of these neurological consequences are preventable through immunization programmes and infectious disease control.

92. The emergence of neurotropic zoonotic infections can be attributed to several causes, including unsustainable agricultural intensification and the increased use and exploitation of wildlife.¹

93. Despite advances in global infectious disease control, epidemic infections such as Zika and SARS-CoV-2 have underscored the importance of infectious disease control as a preventive measure for neurological disorders. For example, the COVID-19 pandemic is expected to impact brain health across the life course, with a wide spectrum of associated neurological manifestations in the acute and post-acute stages of illness.

¹ United Nations Environment Programme and International Livestock Research Institute. Preventing the Next Pandemic: Zoonotic diseases and how to break the chain of transmission. Nairobi, Kenya; 2017.

94. Proposed actions for Member States

- (a) Implement infectious disease management, eradication/elimination/control and immunization programmes based on WHO guidance, such as WHO's road map for neglected tropical diseases 2021–2030, the WHO guidelines on management of *Taenia solium* neurocysticercosis and the defeating meningitis by 2030 global road map. Include approaches for the control of other common and treatable neuroinfectious diseases such as encephalitides and their respective treatments within the health and agricultural sectors, as outlined in WHO's guidance on preventing disease through healthy environments.¹
- (b) Support and promote the availability of rapid and affordable diagnostics for infections of the nervous system (for example lumbar puncture, microscopy, neuroimaging).
- (c) Collaborate with all relevant sectors and stakeholders to mitigate the risks of emerging infectious diseases that cause neurological disorders. Close coordination and intersectoral action within and beyond the health sector, including vector control, water and sanitation, animal and environmental health and education, will be needed to maximize synergies.
- (d) Create national operational plans to deliver interventions for neurological diseases that are in line with a One Health approach, by developing a coordinated plan that outlines stakeholder accountability for humans-, animal-, food- and ecosystem-related actions and by treating animals to prevent the transmission of neuro-infectious pathogens such as mass dog vaccinations for rabies prevention.
- (e) Promote vaccination campaigns and sharing knowledge about the usefulness of vaccinations as a method of reducing neurological disabilities.

95. Actions for the Secretariat

- (a) Offer technical support, tools and guidance to Member States in order to strengthen global, regional and national awareness of infectious disease control and reduce the risk of zoonotic infections and antimicrobial and insecticide resistance, including by establishing animal or livestock trading and farming policies.
- (b) Highlight the neurological consequences of the COVID-19 pandemic and provide guidance on their management in order to strengthen countries' response and improve service delivery at all levels of the health system.

96. Proposed actions for international and national partners

- (a) Promote multistakeholder collaboration within and beyond the health sector, taking a One Health approach and in line with the 2030 Agenda and the SDGs.

3.3 Preventing head/spinal trauma and associated disabilities

97. Traumatic brain and spinal cord injury require complicated and costly medical care. In 2016, there were 27 million new cases of traumatic brain injury and close to 1 million new cases of spinal cord

¹ Prüss-Üstün A, Wolf J, Corvalán CF, Bos R, Neira MP. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. 2016; World Health Organization.

injury globally.¹ Road traffic injuries and falls constitute the highest number of new cases of traumatic brain injury, while other causes such as child abuse and intimate partner violence and sports injuries are also preventable.

98. Each year, 37 million falls are severe enough to require medical attention and mostly affect adults aged 60 years and older, particularly those with comorbidities that impair ambulation such as dementia, Parkinson's disease or multiple sclerosis.²

99. Key risk factors for road traffic injuries include speeding; alcohol or drug consumption; non-use of helmets; lack of seat belts and child restraints; inadequate visibility of pedestrians; driver distractions or fatigue; and inadequate enforcement of traffic laws.

100. Many sport-related injuries can also result in traumatic brain and spinal cord injury. Repetitive mild head trauma is associated with chronic traumatic encephalopathy and increases dementia risk. Awareness, laws and policies to educate sports professionals, parents and athletes and the implementation of helmet or protective devices policies are needed to prevent some cases of traumatic brain and spinal cord injury.

101. Despite the high number of head and spinal cord injuries in low- and middle-income countries, there remains a lack of services, capacity and trained specialists in neurosurgery and neurorehabilitation, which are vital in preventing long-term disability and providing follow-up care for survivors of traumatic brain and spinal cord injury.

102. **Proposed actions for Member States**

(a) Implement the recommendations included in the World report on road traffic injury prevention and proposed by the Commission for Global Road Safety.³ These cover road safety management, safer roads and mobility, safer vehicles, safer road users, increased responsiveness to post-crash emergencies and longer-term rehabilitation for victims.

(b) Strengthen information systems to collect data on traumatic brain injury and spinal cord injury in order to improve understanding on the scale of the issue and its implications.

(c) Promote safer contact sports and develop and implement policies and mandatory education for athletes, parents and coaches to inform them about the risks and neurological complications, such as epilepsy, that are associated with traumatic brain and spinal cord injury.

(d) Develop and implement policies, standards and effective interventions to address unsafe home and community environments for older adults, including poor lighting, slippery floors, loose rugs and beds without rails, as outlined in the Global strategy and action plan on ageing and health.

¹ Global, regional, and national burden of traumatic brain injury and spinal cord injury, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet Neurol.*2019;18(1):56–87. doi: 10.1016/S1474-4422(18)30415-0.

² Prüss-Üstün A, Wolf J, Corvalán CF, Bos R, Neira MP. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. 2016; World Health Organization.

³ Make Roads Safe: A New Priority for Sustainable Development. Commission for Global Road Safety; 2006.

103. Actions for the Secretariat

- (a) Collect and disseminate evidence and best practices to prevent or reduce traumatic brain injury and spinal cord injury, including the prevention of road traffic crashes and falls through the implementation of the Global Plan for the Decade of Action for Road Safety.
- (b) Provide guidance, evidence-based practices and technical support for early rehabilitation and support to people affected by the long-term cognitive or physical consequences of traumatic brain and spinal cord injury in order to minimize both physical and psychological impacts and protect against discrimination and stigma.

104. Proposed actions for international and national partners

- (a) Promote multistakeholder collaboration to raise awareness about the inherent safety and protective quality of road networks for the benefit of all road users, especially the most vulnerable (e.g., pedestrians, bicyclists and motorcyclists) in order to prevent traumatic brain and spinal cord injury.
- (b) Encourage knowledge-sharing and facilitate the global, regional, intergovernmental and national strengthening of policies for safe driving, sports injuries and the promotion of national efforts for increasing helmet use in accordance with WHO's Helmets: a road safety manual for decision-makers and practitioners.

3.4 Reducing environmental risks

105. Exposure to environmental and occupational hazards can directly influence brain health. For example, in 2019 approximately 5% of the global stroke burden (in DALYs) was attributable to ambient air pollution.¹ Across the world, vulnerable communities are subject to greater exposure to environmental toxins due to the conditions in which they work and live.

106. Toxin-induced encephalopathies, including exposure to heavy metals such as lead,² mercury and air pollutants (e.g., carbon monoxide) can cause serious health and nervous system damage in all age groups.³

¹ See GBD Compare.Viz Hub. Institute for Health Metrics and Evaluation; 2021 (<https://vizhub.healthdata.org/gbd-compare/>, accessed 1 December 2021).

² Global elimination of lead paint: why and how countries should take action: technical brief. Geneva: World Health Organization; 2020.

³ Chemical safety. Geneva: World Health Organization (https://www.who.int/health-topics/chemical-safety#tab=tab_1, accessed 1 December 2021).

107. Parkinson's disease has been associated with exposure to pesticides and the industrial solvent trichloroethylene in occupational and non-occupational settings.¹ In addition, migraines can be triggered by environmental pollutants such as bright lights, poor air quality and noise.²

108. Climate change is one of several concurrent global environmental changes that simultaneously affect human health and neurological conditions, often in an interactive manner. For example, the transmission of vector-borne neurotropic viruses such as Zika, Japanese encephalitis and West Nile disease is jointly affected by climatic conditions, population movement, deforestation, land-use patterns, biodiversity losses, freshwater surface configurations and human population density.³

109. Proposed actions for Member States

(a) Promote joint collaborations across relevant ministries (e.g., environment, health, water, sanitation) to link brain health promotion and the prevention of neurological disorders with strategies that focus on healthy living, working and environmental conditions, in line with WHO's guidance on preventing disease through healthy environments.⁴ In particular:

- accelerate progress towards the global phase-out of lead paint through regulatory and legal measures;
- develop and implement health promotion and protection strategies and programmes across sectors in order to limit exposure to pesticides and other high-priority chemicals, such as trichloroethylene, which have been associated with neurotoxic effects; and
- address the health aspects of exposure to mercury and mercury compounds through collaboration between health authorities, environment authorities and others.

(b) In partnership with nongovernmental organizations, the private sector and other intersectoral stakeholders, integrate environmental determinants that are specific to brain health and neurological disorders into broader mitigation strategies for reducing the impact of climate change, including interventions and policies that promote access to clean air (ambient and household), such as the reduction of fossil fuels and the promotion of cleaner cookstoves and safe water, sanitation, and hygiene.

110. Actions for the Secretariat

(a) Provide support to Member States in evaluating and implementing evidence-based options that suit their needs and capacities in order to assess the health impact of public policies, evidence generation and guidance regarding environmental risk such as air pollution, heavy metals,

¹ Ascherio A, Schwarzschild MA. The epidemiology of Parkinson's disease: risk factors and prevention. *Lancet Neurol.* 2016;15(12):1257–1272. doi: 10.1016/S1474-4422(16)30230-7; Ascherio A, Chen H, Weisskopf MG, O'Reilly E, McCullough ML, Calle EE, et al. Pesticide exposure and risk for Parkinson's disease. *Ann Neurol.* 2006;60(2):197–203. doi: 10.1002/ana.20904.

² Prüss-Üstün A, Wolf J, Corvalán CF, Bos R, Neira MP. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. 2016; World Health Organization.

³ Climate change and health. Key facts. Geneva: World Health Organization (<https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>, accessed 1 December 2021).

⁴ Prüss-Üstün A, Wolf J, Corvalán CF, Bos R, Neira MP. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. 2016; World Health Organization.

pesticide and industrial solvents for optimal brain health and the prevention of neurological disorders.

111. **Proposed actions for international and national partners**

(a) Promote at national, regional and international levels WHO's guidance on preventing disease through healthy environments and highlight the importance of climate change on brain health, in line with the 2030 Agenda and the SDGs.

(b) Collaborate with stakeholders to support the development of international standards for environmental pollutants (for example emissions, second-hand smoke, levels of environmental toxins) to help guide legislation.

(c) Support research to understand the contribution of environmental risk factors to the morbidity and mortality of neurological disorders, especially in low-resource settings.

3.5 Promotion of optimal brain development in children and adolescents

112. The early stages of life, including the fetal stage and birth, present a particularly important opportunity to promote brain health and prevent neurological disorders that can have lifelong consequences as a child's brain develops and adapts rapidly in response to the surrounding environment, nutrition and stimulation.

113. Optimizing brain development in the formative stages involves creating conditions for nurturing care¹ and family and parenting support through public policies, programmes and services. These enable communities and caregivers to attend to children's good health, nutrition and protection from threats.

114. Access to formal education and inclusive education for children with disabilities have also been shown to improve brain health outcomes. All children and adolescents should be able to live, study and socialize in supportive, healthy and safe environments without stigma, discrimination or bullying. Exposure to early life adversity such as maltreatment, neglect, experience of war or conflict, inadequate maternal nutrition (such as lack of folic acid or iron), poor caregiver health, substance use, congenital infections (such as TORCH syndrome – toxoplasmosis, rubella, cytomegalovirus, herpes simplex) or birth complications can have a negative impact on the developing brain and carry lifelong implications for brain health.

115. Certain environmental pollutants are specifically known to affect neurodevelopment. These include air pollution, heavy metals in soil and water, lead in household paint, mercury in seafood and workplace exposure and pesticides.² Young children are especially vulnerable to lead toxicity and even low levels of exposure can result in reduced attention span, behavioural problems and reduced educational attainment.

116. Physical activity can confer health benefits for children and adolescents living with neurological conditions, hence limiting sedentary behaviour such as screen-based entertainment (television and

¹ Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential. Geneva: World Health Organization; 2018.

² Prüss-Üstün A, Wolf J, Corvalán CF, Bos R, Neira MP. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. 2016; World Health Organization.

computers) and digital communications such as mobile phones is recommended. In addition, adequate sleep regimens maximize health benefits and brain development for children and adolescents.

117. Proposed actions for Member States

- (a) Develop, fund and implement strategies to promote healthy brain development and prevent neurological disorders in childhood and adolescence, focusing on early intervention and rehabilitation.
- (b) Optimize perinatal and child health care, including safe labour and delivery to prevent hypoxic ischaemic brain damage, neonatal intensive care, the use of birth attendants, skin to skin contact (kangaroo mother care), breastfeeding, maternal mental health care, adequate nutrition, immunization, and child development interventions for responsive caregiving and early learning in line with the WHO nurturing care framework. Encourage and strengthen neurodevelopmental assessment in children and adolescents for early diagnosis and intervention.
- (c) In partnership with relevant national regulatory authorities and other stakeholders, develop, strengthen and monitor breastfeeding and national food and nutrition policies and action plans in line with the global strategy for infant and young child feeding, the comprehensive implementation plan on maternal, infant and young child nutrition and WHO's set of recommendations on the marketing of foods and non-alcoholic beverages to children.¹
- (d) Accelerate the full implementation of the WHO Framework Convention on Tobacco Control in order to reduce fetal exposure, childhood second-hand smoke exposure and adolescent smoking.
- (e) Develop and implement, as appropriate, comprehensive and intersectoral national policies and programmes to reduce the harmful use of alcohol during pregnancy so as to reduce complications such as fetal alcohol spectrum disorder.
- (f) Promote adolescent access to the recommended interventions in the Global Strategy for Women's, Children's and Adolescents' Health, including in humanitarian and fragile settings. Support interventions to promote adolescent brain health and development and establish, as appropriate, adolescent-friendly spaces as a first response to adolescent needs for protection, psychosocial well-being and nonformal education.
- (g) Develop appropriately resourced policies for the improved provision of quality physical education in educational settings, including opportunities for physical activity before, during and after the formal school day. Parks, trees and green areas within urban centres can improve local air quality and offer a refuge for children to play. Implement WHO Guidelines on physical activity and sedentary behaviour, including the recommendations on recreational screen time.
- (h) Strengthen surveillance mechanisms for the core indicators of brain health and development in children and adolescents, including protective and risk factors.

¹ Guidance on ending the inappropriate promotion of foods for infants and young children: implementation manual. Geneva: World Health Organization; 2017.

118. Actions for the Secretariat

- (a) Offer technical support, tools and guidance to Member States and strengthen national capacity for the promotion of optimal brain development in children and adolescents by:
- enhancing leadership within health ministries and other sectors for the development, strengthening and implementation of evidence-based national and/or subnational strategies and associated intersectoral resource planning to optimize brain development in children and adolescents; and
 - compiling and sharing knowledge and best practices related to existing policies that address early childhood and adolescent development, including codes of practice and mechanisms to monitor the protection of human rights.

119. Proposed actions for international and national partners

- (a) Support the development and implementation of global, regional, national and/or subnational policies and programmes for children and adolescents to address maltreatment, neglect, inadequate maternal nutrition, poor caregiver health, substance use (such as alcohol and smoking), congenital infections, birth complications and environmental pollutants.

STRATEGIC OBJECTIVE 4: FOSTER RESEARCH AND INNOVATION AND STRENGTHEN INFORMATION SYSTEMS

120. Evidence generation through high-quality research is needed to inform policy, planning and programming for neurological disorders. It can provide insight into effective services, care models and treatment options and foster innovation and equitable access to products such as health technology for prevention, risk reduction, early diagnosis, treatment and the potential for cure or care for neurological disorders.

121. The complexity surrounding brain and neurological research requires improved coordination in the research environment, with multistakeholder involvement and public-private partnerships and allocation of sufficient resources. In this context, cultivating an environment that fosters research collaborations, including data-sharing, is vital to reduce duplication, identify knowledge gaps, fast-track innovation and build capacity in low-income settings.

122. Implementation research, including health systems evaluation, should be prioritized to harness and scale prevention and treatment strategies for neurological disorders. Such an approach will facilitate the monitoring of interventions and allow for the replication and adaptation of successful interventions.

123. Better representation of low- and middle-income countries in the neuroscience research environment should also acknowledge country-specific and local needs so that strategies for diagnosis and management of neurological disorders are tailored to the context.

124. The meaningful engagement of people with neurological disorders, their carers and families to better support and guide the research and development of innovative solutions for neurological disorders is a principal component of the research agenda.

125. Robust, standardized and easily accessible data forms the basis for effective planning and the establishment of targeted interventions. Yet, significant data gaps on neurological disorders exist not only in low- and middle-income countries but also in high-income countries.

Global targets for strategic objective 4

Global target 4.1

80% of countries routinely collect and report on a core set of indicators for neurological disorders through their national health data and information systems at least every three years by 2031.

Global target 4.2

The output of global research on neurological disorders doubles by 2031.

4.1 Investment in research

126. If the incidence of neurological disorders is to be reduced and the lives of people with neurological disorders are to be improved, sustained investment in biomedical, clinical, implementation and translational research are crucial to inform prevention, diagnosis, treatment and care and create the potential to cure more neurological disorders.

127. All research and innovation activities for neurological disorders must be rooted in equity, diversity and inclusiveness, with increased engagement of people with neurological disorders.

128. Investments in neurological research should be accompanied by increased collaboration between Member States and relevant stakeholders, with a particular focus on strengthening global and regional cooperation. Facilitating a global research agenda for neurology will increase the likelihood of effective progress towards better prevention, diagnosis, treatment and care for people with neurological disorders, while reducing redundancies and the duplication of research and costs.

129. Concerted action to build research infrastructure, strengthen human resources in research and development and increase collaboration among the research community, health professionals, people with neurological disorders and the private sector is needed to catalyze neurological research and development, particularly in low- and middle-income countries.

130. Proposed actions for Member States

(a) Increase investment and improve research governance as an integral component of the national response to address the burden of neurological disorders. Facilitate the development of new diagnostics, treatments, technology and innovations for people with, and at risk of developing, neurological disorders. Such innovations include, but are not limited to, the use of big data, AI, diagnostics, precision medicine, disease monitoring and assessment tools, assistive technologies, pharmaceuticals and new models of care.

(b) Support national, regional and international research collaborations on neurological disorders in order to generate new knowledge on the promotion, prevention, diagnosis, treatment and care of neurological disorders and translate existing evidence about neurological disorders into action. Encourage the sharing of, and open access to, research data.

- (c) Build the knowledge and capacity of decision-makers on the need for innovation in the area of brain health and highlight the importance of prioritizing funding for neurological disorders research in national research organizations.
- (d) Strengthen national institutional capacity for research and innovation, such as for the development of new drugs for neurological disorders, including for children, by improving research infrastructure, equipment and supplies.
- (e) Involve and support people with neurological disorders, their carers and the organizations that represent them in actively participating in the research process from planning to implementation.

131. **Actions for the Secretariat**

- (a) Support advocacy efforts for increased investment in research for neurological disorders through research prioritization and agenda-setting in the fields of biomedical, clinical, implementation and translational research at global, regional and national levels.
- (b) Engage WHO collaborating centres, academic institutions, research organizations and alliances to strengthen the capacity for research on neurological disorders.
- (c) Support international coordination mechanisms to facilitate harmonized global research efforts in neurology and foster regular communication and information exchange between stakeholders to build a globally connected research community.
- (d) Offer guidance and technical support to Member States in developing new diagnostics, treatments and innovative technologies for neurological disorders and mechanisms in order to ensure equitable access and implementation, particularly in low-resource settings.

132. **Proposed actions for international and national partners**

- (a) Promote and mobilize financial support for research in neurological disorders, participate in priority-setting exercises and contribute to the dissemination of research findings in user-friendly language to policymakers, the public, people with neurological disorders, their carers and families.
- (b) Engage the research community, health professionals, policymakers and the private sector in promoting the innovation and development of new tools and treatments for neurological disorders, while ensuring equitable and affordable access of these products in low- and middle-income countries.
- (c) Support national efforts to strengthen capacity for research, development and innovation and knowledge exchange, including institutional capacity-building, research collaborations and the creation of fellowships and scholarships for the prevention, diagnosis, treatment and care of neurological disorders.
- (d) Support implementation research in low- and middle-income countries in order to generate knowledge about barriers to integrating the treatment of neurological disorders into widespread clinical care and about effective strategies to overcome such barriers.

4.2 Data and information systems

133. The availability of health and social care data on neurological disorders can support the identification of gaps in service delivery, improve the accessibility to and coordination of care for people with neurological disorders and promote better understanding and detection of population-level changes and trends.

134. Information systems for neurological disorders are often rudimentary or absent, especially in low-income countries, which complicates data acquisition on the availability and utilization of neurological services and the needs of people with neurological disorders and their carers.

135. The systematic integration of data collection into population-level and routine health information systems and the regular monitoring of neurological disorders based on a core set of measures forms the basis of evidence-based actions to improve services and measure progress towards implementing national programmes for neurological disorders and brain health.

136. Proposed actions for Member States

(a) Integrate the monitoring of neurological disorders into routine information systems and across all levels of care in order to identify, collate and routinely report core data, disaggregated by sex, age and other equity measures, in order to improve neurological care service delivery and promotion and prevention strategies and provide an understanding of the social determinants of neurological disorders.

(b) Encourage patient registries, surveillance programmes, analysis and publication of data on the availability and evaluation of utilization and the coverage of services and effective treatments for neurological disorders.

(c) Support data collection and cross-referencing to other monitoring and accountability mechanisms in order to avoid duplication of efforts at country level.

137. Actions for the Secretariat

(a) Offer technical support to Member States to:

- develop and/or improve national data collection systems in order to strengthen data collection for neurological disorders;
- build national capacity and resources for the systematic collection and analysis of data related to neurological disorders and the facilitation of its use;
- develop a core set of indicators and targets in line with this and other global action plans and WHO monitoring frameworks in order to monitor outcomes related to neurological disorders.

138. Proposed actions for international and national partners

(a) Provide support to Member States in establishing surveillance, information systems and registries that capture core indicators and patient outcome measures on neurological disorders.

- (b) Advocate for and facilitate the involvement of people with neurological disorders, their families and carers in the collection, analysis and use of data on neurological disorders.
- (c) Support the creation of exchange and dialogue platforms between countries for best practices in collection, management and use of data.

STRATEGIC OBJECTIVE 5: STRENGTHEN THE PUBLIC HEALTH APPROACH TO EPILEPSY

139. Epilepsy affects people of all ages, genders, races and income levels. Poor populations and those living in low- and middle-income countries bear a disproportionate disease burden, which poses a threat to public health and economic and social development.

140. In many parts of the world, people with epilepsy and their families suffer from stigmatization and discrimination due to ignorance, misconceptions and negative attitudes surrounding the disease. They often face serious difficulties in education, employment, marriage and reproduction.

141. The risk of premature death in people with epilepsy is three times higher than the general population. Important causes of death and injury include sudden unexpected deaths in epilepsy, status epilepticus, burns, drowning and suicide. Excess mortality is higher in low- and middle-income countries and is associated with lack of access to health facilities, large treatment gaps and a failure to address the potentially preventable causes of epilepsy.

142. Epilepsy often co-exists with and can be compounded by other comorbid health conditions, including other neurological disorders, necessitating a synergistic approach to addressing co-existing conditions.

Global targets for strategic objective 5

Global target 5.1

By 2031, countries will have increased service coverage for epilepsy by 50% from the current coverage in 2021.

Global target 5.2

80% of countries will have developed or updated their legislation with a view to promoting and protecting the human rights of people with epilepsy by 2031.

5.1 Access to services for epilepsy

143. Epilepsy is a highly treatable condition and more than 70% of people with epilepsy could live seizure-free lives if they had access to appropriate anti-seizure treatment, the most cost-effective of which are included in the WHO Model List of Essential Medicines. Despite this, the current treatment gap for epilepsy is estimated at 75% in low-income countries and is substantially higher in rural than in urban areas.¹

¹ Epilepsy: a public health imperative. Geneva: World Health Organization; 2019.

144. Wide treatment gaps may result from a combination of decreased capacity in health care systems, the inequitable distribution of resources and the low priority assigned to epilepsy care. Factors that widen this gap include staff shortage, limited access to anti-seizure medicines, lack of knowledge and confidence of PHC workers in the management of epilepsy, misconceptions and stigma.

145. PHC provides a platform to address the health needs of people with epilepsy through a person-centred approach. With political will and a combination of innovative strategies, epilepsy prevention, diagnosis and treatment can be integrated into primary health services in cost-effective ways, even in low-resource settings.

146. Proposed actions for Member States

(a) Develop and strengthen models of care for epilepsy that promote high-quality, people-centred primary care as the core of integrated health services throughout the life course. Strong and functional referral systems with specialist services, as well as care for refractory epilepsy, should be made available. Specialists support the integration of epilepsy care in PHC by, for example, confirming the diagnosis of epilepsy, providing care for refractory epilepsy and assessing the need for resective surgery.

(b) Enhance training and support in epilepsy diagnosis and management of the PHC workforce, including facility-, outreach- and community-based health workers, school staff and emergency care workers, as well as specialist training at secondary and tertiary levels.

(c) Develop strategies for the meaningful engagement of the community in order to increase the demand for epilepsy services.

(d) Implement strategies to make anti-seizure medicines more available, accessible and affordable, considering also the specific needs of children, adolescents and women of childbearing age.

Strategic options include:

- including essential anti-seizure medicines in national essential medicine lists and formularies;
- strengthening supply chains and systems of selection;
- increasing procurement and distribution; and
- improving access to controlled medicines such as phenobarbital.

(e) Improve care to prevent the common causes of epilepsy such as perinatal injury, including hypoxic ischaemic brain injury, central nervous system infections, stroke and traumatic brain injuries, by promoting safe pregnancies and births, preventing head trauma and controlling neuroinfectious diseases such as neurocysticercosis, meningitis, encephalitis and malaria, in line with other global initiatives.

(f) Provide people with epilepsy with information about their disorder to help them understand the importance and benefits of medication adherence and raise awareness of seizure triggers and

monitoring and fundamental strategies for self-management and self-care (e.g., through adequate sleep and regular meals).

(g) Strengthen the monitoring and evaluation of epilepsy services through well-functioning health information systems that generate reliable data and support the use of information for improved decision-making and learning by local, national and global actors. Data should be collected from multiple sources, including registries and disease-specific reporting systems, surveys and administrative and clinical data sets.

147. **Actions for the Secretariat**

(a) Develop and disseminate technical guidance to address key gaps and strengthen actions for epilepsy at global and national levels by addressing key policy, implementation and research considerations.

(b) Provide guidance on strengthening the implementation of the epilepsy component of WHO's mental health gap action programme, including updated recommendations, to provide quality care and evidence-based interventions through PHC and using digital technology.

(c) Offer support to Member States for documenting and sharing best practices of evidence-based epilepsy service delivery and care coordination.

148. **Proposed actions for international and national partners**

(a) Establish community teams to support people with epilepsy, their carers and family in the community and strengthen mechanisms to engage with complementary and alternate medicine providers such as traditional healers.

(b) Advocate for the availability of anti-seizure medicines at affordable prices at all levels of the health care system, especially PHC centres.

(c) Support people with epilepsy and their families and carers to access services, for example by developing evidence-based, user-friendly information and training tools for epilepsy and available services and/or by setting up websites with information and advice at local levels.

(d) Conduct implementation research, including the dissemination of lessons learned to accelerate the scale-up of successful strategies to strengthen epilepsy services.

5.2 **Engagement and support for people with epilepsy**

149. People with epilepsy and their families across all resource settings are subjected to stigmatization and discrimination as a result of the misconceptions and negative attitudes that surround epilepsy, including the belief that epilepsy is the result of possession by evil spirits or that it is contagious.

150. Stigmatization leads to human rights violations and social exclusion. In some settings, children with epilepsy may not be allowed to attend school, while adults with the condition may not be able to find suitable employment or to marry.

151. Innovative strategies are needed to strengthen international efforts and national leadership to support policies and laws for people living with epilepsy, improve public attitudes and reduce stigma, while fully respecting the human rights of people living with epilepsy.

152. People with epilepsy, their carers and organizations that represent them should be empowered and involved in advocacy, policy, planning, legislation, service provision, monitoring and research in epilepsy.

153. Proposed actions for Member States

(a) Encourage the inclusion of views and needs of people with epilepsy and their families in relevant health policies and all aspects of developing and strengthening services that support their autonomy. Strong attention to gender, diversity and equity is needed to empower the most vulnerable.

(b) Develop or strengthen legislation to promote and protect the rights of people with epilepsy and prohibit discrimination with respect to education, employment, marriage and family planning, obtaining a driving licence and recreation, among others. Improve accountability by setting up mechanisms, using existing independent bodies where possible, to monitor and evaluate the implementation of policies and legislation relevant to epilepsy in order to ensure compliance with the Convention on the Rights of Persons with Disabilities.

(c) Facilitate joint community initiatives, with strong community provider leadership and civil society engagement, as part of scaling up community-owned initiatives on epilepsy.

(d) Enhance access to a range of person-centred, culturally appropriate and responsive services, including liaison with local nongovernmental organizations and other stakeholders, in order to provide information that empowers people with epilepsy to make informed choices and decisions about their care.

154. Actions for the Secretariat

(a) Support the active participation of people with epilepsy and their families in the development of relevant technical products, norms and standards.

(b) Support Member States in developing key capacities to effectively engage in participatory processes that involve people with epilepsy and their families and to leverage these results for decision-making.

155. Proposed actions for international and national partners

(a) Ensure that people with epilepsy are included in the activities of the wider community and foster cultural, social and civic participation by enhancing their autonomy.

(b) Support advocacy efforts and public education activities related to epilepsy for community health workers, community leaders and people with epilepsy and their families in order to correct misconceptions, counter negative attitudes towards people with epilepsy and provide knowledge of how to help a person having a seizure.

5.3 Epilepsy as an entry point for other neurological disorders

156. Epilepsy can result from genetic or other often unknown causes, but may also be a consequence of other neurological conditions. For example, epilepsy can be secondary to stroke, infections, brain tumours or traumatic brain injury. Epilepsy is also comorbid with other neurological conditions. For example, migraine occurs in about 19% of people with epilepsy and intellectual disability in approximately 26% of adults and 30–40% of children with epilepsy.¹

157. A seizure can also be a manifestation of other conditions such as infections, metabolic imbalance, brain tumours and neurodegenerative diseases. It can also be a signal of deterioration or change in an underlying neurological condition.

158. Epilepsy and a wide range of other neurological disorders share similar diagnostic and therapeutic technologies, as well as similar research, pharmacological and psychosocial approaches.

159. A well-functioning epilepsy care service can present a good opportunity for strengthening the management of other neurological disorders. Epilepsy can therefore serve as an entry point for accelerating the strengthening of services and support for both epilepsy and other neurological disorders. Other neurological disorders, identified based on national priorities, should be considered concurrently alongside epilepsy treatment and care to achieve the best results for all. This approach may be applicable in some parts of the world, while in others stroke, dementia and neurodegenerative disorders, migraine and other headache disorders may serve as the entry point.

160. Proposed actions for Member States

(a) Orient health systems to expand existing epilepsy prevention, diagnosis, treatment and care to the management of comorbidities as an essential component at all levels of care. For example, good interdisciplinary team care for epilepsy can be transferred to the care of other neurological disorders.

(b) Strengthen the capacity of health workers serving at the PHC level to develop competencies that extend beyond epilepsy care to cut across other neurological disorders, including the treatment of comorbidities, drawing on WHO's mental health gap action programme.²

(c) Leverage epilepsy diagnostics such as the electroencephalogram (EEG), neuroimaging technology (including CT and MRI) and specialized referral services (e.g., surgery) to include facilities for diagnosis and management of other neurological disorders.

(d) Expand procurement systems developed for anti-seizure medicines to improve access to effective and quality medicines for other neurological disorders.

¹ Epilepsy: a public health imperative. Geneva: World Health Organization; 2019.

² Mental Health Gap Action Programme (mhGAP). Geneva: World Health Organization (<https://www.who.int/teams/mental-health-and-substance-use/treatment-care/mental-health-gap-action-programme>, accessed 1 December 2021).

161. Actions for the Secretariat

- (a) Support Member States to incorporate care for other neurological conditions in routine epilepsy services at primary care levels by providing strategies, processes and tools for countries to apply in order to strengthen the capacity of the health workforce.
- (b) Promote and facilitate the exchange of best practices at international, regional and national levels in order to inform the implementation of integrated care models for epilepsy and other neurological disorders.

162. Proposed actions for international and national partners

- (a) Activate national networks and lobby administrators, policymakers and other stakeholders to integrate care for comorbidities (i.e., physical and mental health conditions) as an integral part of epilepsy treatment and care services.

ANNEX 8

**DRAFT ACTION PLAN (2022–2030) TO EFFECTIVELY IMPLEMENT
THE GLOBAL STRATEGY TO REDUCE THE HARMFUL USE OF
ALCOHOL AS A PUBLIC HEALTH PRIORITY¹****INTRODUCTION**

1. According to the latest (2018) WHO global estimates, in 2016 worldwide 2.3 billion people 15 years and older drank alcoholic beverages and 3.1 billion did not drink alcohol. It was estimated that in 2016, 283 million people aged 15 years and older – 237 million men and 46 million women – lived with alcohol use disorders (AUDs), accounting for 5.1% of the global adult population. Alcohol dependence, the most severe form of AUD, affected 2.6% of the world's adults or 144 million people.²

2. The overall disease burden attributable to alcohol consumption is unacceptably high. According to WHO estimates, in 2016 alcohol consumption resulted in some 3 million deaths (5.3% of all deaths) worldwide and 132.6 million Disability-adjusted life years or DALYs (5.1% of all DALYs). Mortality from alcohol consumption is higher than from diseases such as tuberculosis, HIV/AIDS and diabetes. In 2016, an estimated 2.3 million deaths and 106.5 million DALYs among men globally were attributable to alcohol consumption. For women, the figures were 0.7 million and 26.1 million, respectively. In 2016, alcohol was responsible for 7.2% of all premature mortality (in persons aged 69 years or less) worldwide. Younger people were disproportionately affected by alcohol; 13.5% of all deaths among those aged 20–39 in 2016 were attributed to alcohol. The age-standardized alcohol-attributable burden of disease and injury was highest in the African Region, whereas the proportions of all deaths and DALYs attributable to alcohol consumption were highest in the European Region (10.1% of all deaths and 10.8% of all DALYs), followed by the Region of the Americas (5.5% of deaths and 6.7% of DALYs). Approximately 49% of alcohol-attributable DALYs are due to NCDs and mental health conditions and about 40% are due to injury. According to estimates of the Organisation for Economic Cooperation and Development (OECD), in OECD and European Union countries alcohol-related diseases and injuries could cause life expectancy to be shortened by 0.9 years³ due to drinking above 1 drink per day for women and 1.5 drinks per day for men.²

3. Since the endorsement of the Global strategy to reduce the harmful use of alcohol by the Sixty-third World Health Assembly in May 2010 in resolution WHA63.13, some progress has been made in reducing total global alcohol per capita consumption. The consumption levels for people aged 15 years and over remained relatively stable in 2010 (6.1 litres) and 2015 (6.2 litres), while according to the latest available WHO estimates they decreased to 5.8 litres in 2019, which corresponds to an approximately 5% relative reduction globally in comparison to 2010. The highest levels of consumption per capita were observed in countries in the European Region.⁴ Consumption of alcohol per capita increased, however, in the South-East Asia Region (3.4 and 4.3 litres). The impact of the COVID-19

¹ See also document EB150/7 Add.1.

² Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018 (accessed 5 June 2021). New WHO estimates of the alcohol-attributable disease burden for 2019 will be produced in 2022.

³ OECD (2021). Preventing Harmful Alcohol Use, OECD Health Policy Studies, OECD Publishing, Paris (<https://doi.org/10.1787/6e4b4ffb-en>, accessed 9 December 2021).

⁴ World Health Statistics 2021: Monitoring Health for the SDGs. Geneva: World Health Organization, 2021.

pandemic on levels and patterns of alcohol consumption and related harm worldwide remains a topic of ongoing assessment.

4. The number of drinkers declined across all WHO regions between 2010 and 2019. In 2019, alcohol was consumed by more than half of the population in three of the six WHO regions: the Americas, European and the Western Pacific regions. Age-standardized prevalence of heavy episodic drinking (defined as 60 or more grams of pure alcohol on at least one occasion at least once per month) decreased globally from 20.6% in 2010 to 18.5% in 2016 and 18.0% in 2019 among the total population but remained high among drinkers, particularly in parts of Eastern Europe and in some sub-Saharan African countries (more than 60% among current drinkers). In all WHO regions, higher alcohol consumption rates and higher prevalence rates of current drinkers are associated with the higher economic wealth of countries. However, the prevalence of heavy episodic drinking is equally distributed between higher- and lower-income countries in most regions. The two exceptions to that trend are the African Region (where rates of heavy episodic drinking are higher in lower-income countries than in higher-income countries) and the European Region (where, conversely, heavy episodic drinking is more frequent in high-income countries).¹

5. Overall – despite some positive decreasing trends in alcohol consumption, age-standardized alcohol-attributable deaths and DALYs, as well as progress in alcohol policy developments at national level – the implementation of the global strategy has not resulted in considerable reductions in alcohol-related morbidity and mortality and the ensuing social consequences. Globally, levels of alcohol consumption and alcohol-attributable harm remain unacceptably high.

6. At its 146th session, the WHO Executive Board considered the report of the Director-General on the political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases,² in particular Annex 3 to that report, entitled “Implementation of the global strategy to reduce the harmful use of alcohol during the first decade since its endorsement, and the way forward”, and the report on the findings of the consultative process on the implementation of the global strategy and the way forward.³ In its decision EB146(14), the Board requested the WHO Director-General, inter alia, “to develop an action plan (2022–2030) to effectively implement the global strategy to reduce the harmful use of alcohol as a public health priority, in consultation with Member States and relevant stakeholders, for consideration by the Seventy-fifth World Health Assembly, through Executive Board at its 150th session in 2022”. In the same decision, the Board further requested the Director-General “to develop a technical report on the harmful use of alcohol related to cross-border alcohol marketing, advertising and promotional activities, including those targeting youth and adolescents, before the 150th session of the WHO Executive Board, which could contribute to the development of the action plan”, as well as “to adequately resource the work on the harmful use of alcohol”.

¹ WHO Global Information System on Alcohol and Health (GISAH). Geneva: World Health Organization (<https://www.who.int/data/gho/data/themes/global-information-system-on-alcohol-and-health>, accessed 25 November 2021). See also WHO global status report on alcohol and health 2018. Geneva: World Health Organization; 2018.

² Document EB146/7.

³ Document EB146/7 Add.1.

7. The draft of the action plan requested (see Appendix)¹ was developed by the WHO Secretariat by implementing the following activities:

- production of a zero draft of the working document with proposed essential elements and components (April–June 2020);
- a technical expert meeting to discuss the zero draft of the working document for development of the action plan and the content of the technical report on the harmful use of alcohol related to cross-border alcohol marketing, advertising and promotional activities (10–12 June 2020);
- finalization and translation of the working document to make it available in the six official languages of WHO, followed by a web-based consultation on the working document open to Member States, United Nations organizations and other international organizations and non-State actors (16 November–13 December 2020);
- regional technical consultations with Member States on the working document for development of the action plan (2022–2030) in:
 - Eastern Mediterranean Region (23 February 2021);
 - South-East Asia Region (10–11 March 2021);
 - Region of the Americas (16–17 March 2021);
 - European Region (25–26 March 2021);
 - African Region (31 March–1 April 2021); and
 - Western Pacific Region (by correspondence) (March–April 2021);
- development of the first draft of the action plan, based on input received on the working document in the process of the regional consultations (April–June 2021) and translation of the first draft to make it available in the six official languages of WHO;
- discussions of the first draft with representatives of civil society organizations, technical focal points from Member States, representatives of UN entities and academia at the Third WHO Forum on Alcohol, Drugs and Addictive Behaviours (25 June 2021);
- dialogue with economic operators in alcohol production and trade on proposed measures for economic operators in the first draft of the action plan (29 June 2021);
- web-based consultation on the first draft of the action plan open to Member States, United Nations organizations and other international organizations and non-State actors (27 July 2021–3 September 2021);
- informal consultation with Member States on the first draft of the action plan (31 August 2021);

¹ See document EB150/7 Add.1.

- development of the second draft of the action plan and informal consultation with Member States on the second draft (8 October 2021); and
- finalization of the draft action plan, taking into consideration the feedback on the second draft by Member States during and after the informal consultation on 8 October 2021.

ANNEX 9

**DRAFT RECOMMENDATIONS FOR THE PREVENTION AND MANAGEMENT
OF OBESITY OVER THE LIFE COURSE, INCLUDING CONSIDERING THE
POTENTIAL DEVELOPMENT OF TARGETS IN THIS REGARD**

OBESITY KEY ANALYSIS

1. Obesity is a complex multifactorial disease defined by excessive adiposity that impairs health.¹ Obesity is also one of the key risk factors for many NCDs such as coronary heart disease; hypertension and stroke; certain types of cancer; type 2 diabetes; gallbladder disease; dyslipidaemia; musculoskeletal conditions such as osteoarthritis; gout; and pulmonary diseases, including sleep apnoea. Obesity is the most important modifiable risk factor for type 2 diabetes. In addition, people living with obesity often experience mental health issues alongside different degrees of functional limitations, i.e. obesity-related disability,² and they suffer from social bias, prejudice and discrimination.³ Obesity has several root drivers and determinants, including genetics, biology, access to health care, mental health, diet, education, sociocultural factors, economics, environments and commercial interests, among others.
2. Body mass index (BMI) is a marker of adiposity calculated as weight divided by height in metres squared (kg/m^2) and is used for population surveillance of obesity. The BMI categories for defining obesity vary by age and gender in infants, children and adolescents. For adults, obesity is defined by a BMI greater than or equal to 30.00 kg/m^2 . A BMI ranging from 25.00 to 29.99 kg/m^2 is also associated with increase disease risk and is referred to as pre-obesity. This continuum of risk is acknowledged by considering overweight, which includes adults with a BMI greater than 25.00 kg/m^2 . For children aged 5-19, obesity is defined by a BMI-for-age greater than two standard deviations above the WHO growth reference median. For children under 5, overweight is used as the indicator, defined as weight-for-height greater than two standard deviations above WHO Child Growth Standards median.
3. Globally, the prevalence of overweight and obesity and the number of affected individuals have increased in all age groups and will continue rising during the next decade.⁴

¹ ICD-11 Code 5B81.

² ICF-OB: a multidisciplinary questionnaire based on the International Classification of Functioning, Disability and Health to address disability in obesity. *Eur J Physical Rehab Med.* 2018;54(1):119-21. doi: 10.23736/S1973-9087.17.04836-5.

³ Obesity: preventing and managing the global epidemic. Report of a WHO consultation. *World Health Organ Tech Rep Ser.* 2000;894:i-xii, 1-253.

⁴ Estimates for children under 5 years are available in UNICEF–WHO–World Bank Joint Child Malnutrition Estimates for 2020 (<https://www.who.int/data/gho/data/themes/topics/joint-child-malnutrition-estimates-unicef-who-wb>, accessed 1 December 2021). The unpublished projections for 2030 prepared by WHO's Department of Nutrition and Food Safety are being updated. They will be provided in the next version of the paper on estimates for children 5–19 years ([https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-children-and-adolescents-bmi-2-standard-deviations-above-the-median-\(crude-estimate\)-\(-\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-children-and-adolescents-bmi-2-standard-deviations-above-the-median-(crude-estimate)-(-)), accessed 1 December 2021). Unpublished projections for 2030 are provided by the Department of Maternal, Newborn, Child and Adolescent Health and Ageing. See also Prevalence of obesity among adults, BMI ≥ 30 (crude estimate) (%) adults ([https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-adults-bmi-30-\(crude-estimate\)-\(-\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-adults-bmi-30-(crude-estimate)-(-)), accessed 1 December 2021). Projections for 2030 are not yet available.

	2000	2020	2030
Children under 5 with overweight	33.3 million	38.9 million	39.8 million
Children aged 5–19 with obesity	52.3 million	150 million	254 million
Adults with overweight	1.2 billion	1.9 billion	TBD ¹
Adults with obesity	0.3 billion	0.6 billion	TBD

4. The following alarming trends are surfacing:

- Almost half of children under 5 affected by overweight live in Asia and more than one quarter of them live in Africa.
- The prevalence of obesity among children 5–19 years in 2016 was about 20% or more in several countries in the Pacific, the Eastern Mediterranean, the Caribbean and the Americas.² Globally, there was a threefold increase in the number of obese children and adolescents from 2000 to 2020.
- Among adults, rates of obesity are growing most rapidly in middle-income countries, particularly in Southeast Asia and Africa. Globally, 1 in 5 adults are predicted to have obesity by 2025, with all countries off track to meet targets to halt obesity by 2025.
- Most of the world’s population live in countries where overweight and obesity have a greater impact on the burden of disease than underweight.³

5. Overweight and obesity in childhood and adolescence are associated with adverse health consequences and with increased morbidity later in life. Preventing and controlling excess adiposity in children and adolescents is important for many reasons. Weight loss and maintenance after weight loss are hard to achieve,⁴ therefore gaining excess weight in childhood and adolescence is likely to lead to overweight and obesity in adulthood.⁵

¹ Estimates currently under development.

² NCD Risk Factor Collaboration. Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128·9 million children, adolescents, and adults. *Lancet* 2017;390(10113):2627–2642. doi: 10.1016/S0140-6736(17)32129-3.

³ Prevalence of Obesity. World Obesity (<https://www.worldobesity.org/about/about-obesity/prevalence-of-obesity>, accessed 1 December 2021).

⁴ MacLean P, Higgins J, Giles E, Sherk V, Jackman M. The role for adipose tissue in weight regain after weight loss. *Obes Rev.* 2015;16 Suppl 1 (Suppl 1):45–54. doi: 10.1111/obr.12255.

⁵ Singh AS, Mulder C, Twisk JW, van Mechelen W, Chinapaw MJ. Tracking of childhood overweight into adulthood: a systematic review of the literature. *Obes Rev.* 2008;9(5):474–488. doi: 10.1111/j.1467-789X.2008.00475.x.

- Being overweight in childhood and adolescence affects children's and adolescents' immediate health and is associated with greater risk and earlier onset of various NCDs, such as type 2 diabetes and cardiovascular disease.^{1,2,3,4}
- Childhood and adolescent obesity has adverse psychosocial consequences; it affects school performance and quality of life, compounded by stigma, discrimination and bullying.^{5,6}
- Children with obesity are very likely to remain obese as adults and are also at a higher risk of developing NCDs in adulthood.

6. Overweight and obesity in adult life, including in the ageing population, are associated with increased all-cause mortality. People with obesity have also a fourfold higher risk of developing severe Covid-19 disease than people with no obesity.⁷

7. People living with obesity are frequently subject to stigma and bias, including from health care professionals, with potential impact on the access and quality of care and treatment received.⁸ Overweight and obesity also impair individuals' lifetime educational attainment and access to the labour market and place a significant burden on health care systems, family, employers and society as a whole.^{9,10,11}

8. The costs of obesity and obesity-related diseases are increasing. It is estimated that the total cost to the health care system related to the current prevalence of excess BMI is US\$ 990 billion per year globally, representing more than 13% of all health care expenditure.¹² Obesity also results in indirect costs, such as impaired productivity, lost life years and reduced quality of life. The combined direct and

¹ Must A, Jacques PF, Dallal GE, Bajema CJ, Dietz WH. Long-term morbidity and mortality of overweight adolescents. A follow-up of the Harvard Growth Study of 1922 to 1935. *N Engl J Med.* 1992;327(19):1350–1355. doi: 10.1056/NEJM199211053271904.

² Abdullah A, Wolfe R, Stoelwinder JU, De Courten, M, Stevenson C, Walls HL, et al. The number of years lived with obesity and the risk of all-cause and cause-specific mortality. *Int J Epidemiol.* 2011;40(4):985–996. doi: 10.1093/ije/dyr018.

³ Park M, Falconer C, Viner R, Kinra S. The impact of childhood obesity on morbidity and mortality in adulthood: a systematic review. *Obes Rev.* 2012;13(11):985–1000. doi: 10.1111/j.1467-789X.2012.01015.x.

⁴ Palma Dos Reis CR, et al. The fetal origins of disease: a prospective cohort study on the association of preeclampsia and childhood obesity. *J Dev Orig Health Dis.* 2021;1–7.

⁵ Caird J, Kavanagh J, O'Mara-Eves A. Does being overweight impede academic attainment? A systematic review. *Health Educ J.* 2014;73:497–521.

⁶ Quek YH, Tam WW, Zhang MW, Ho R. Exploring the association between childhood and adolescent obesity and depression: a meta-analysis. *Obes Rev.* 2017; 18(7):742–754. doi: 10.1111/obr.12535.

⁷ Cai Z, Yang Y and Zhang J. Obesity is associated with severe disease and mortality in patients with coronavirus disease 2019 (COVID-19): a meta-analysis. *BMC Public Health* 2021; 21(1)1505. doi: 10.1186/s12889-021-11546-6.

⁸ Phelan SM, Burgess DJ, Yeazel MW, Hellerstedt WL, Griffin JM, van Ryn M. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. doi: 10.1111/obr.12266.

⁹ Muller-Riemenschneider F, Reinhold T, Berghofer A, Willich SN. Health-economic burden of obesity in Europe. *Eur J Epidemiol.* 2008;23:499–509. doi: 10.1007/s10654-008-9239-1.

¹⁰ Report of the commission on ending childhood obesity. Geneva: WHO; 2016.

¹¹ Shekar M, Popkin B, eds. 2020. Obesity: Health and Economic Consequences of an Impending Global Challenge. Human Development Perspectives series. Washington, DC: World Bank. doi:10.1596/978-1-4648-1491-4.

¹² Calculating the costs of the consequences of obesity. World Obesity Federation;2017.

indirect health care costs of obesity are currently estimated at approximately 3.3% of total GDP in OECD countries.¹

9. In high-income countries with established obesity epidemics, prevalence is higher in low-socioeconomic status groups. In low-income countries, the prevalence of obesity is usually higher in urban, high-socioeconomic status groups, but can later expand to a broader cross-section of society in both urban and rural areas.²

EARLIER WHO WORK ON OBESITY

10. A 1997 expert consultation report concluded that the fundamental causes of the obesity epidemic worldwide are sedentary lifestyles and high-fat energy-dense diets, both resulting from changes taking place in society and the behavioural patterns of communities as a consequence of increased urbanization and industrialization and the disappearance of traditional lifestyles. The report recommended: (a) the use of public health approaches to the prevention and management of overweight and obesity in populations, namely improving the knowledge and skills of the community and reducing population exposure to an obesity-promoting environment; and (b) adopting an integrated health care services approach in community settings for the prevention and management of overweight and obesity in at-risk individuals.

11. A 2002 expert consultation report highlighted the importance of: (a) promoting exclusive breastfeeding and ensuring the appropriate micronutrient intake needed to promote optimal linear growth for infants and young children; and (b) restricting the intake of energy-dense, micronutrient-poor foods (e.g. packaged snacks), restricting the intake of sugar-sweetened beverages, limiting television viewing and promoting active lifestyle for children and adolescents, among other interventions. In addition, the report also highlighted other measures, including limiting the exposure of children to intensive marketing practices, providing the necessary information and skills to make healthy food choices, modifying the environment to enhance physical activity in schools and communities, and creating more opportunities for family interaction (such as eating family meals). In the countries where undernutrition is prevalent, the report indicated that nutrition programmes designed to control or prevent undernutrition need to assess stature in combination with weight in order to prevent providing excess energy to children of low weight-for-age but normal weight-for-height. These recommendations were reflected in the global strategy on diet, physical activity and health.³ Following the publication of the 2002 report, additional evidence has emerged regarding the complex drivers of obesity, including its role in maternal and fetal health, the role of mental health, sleep and other factors in obesity risk and the impact of metabolic changes on sustained weight loss, as well as developments in some clinical treatment options.

12. The 2012 comprehensive implementation plan on maternal, infant and young child nutrition established a global target of no increase in childhood overweight through 2025. Key interventions for reducing the risk of unhealthy weight gain in childhood included: (1) addressing early life exposures to improve nutritional status and growth patterns; (2) improving community understanding and social

¹ The Heavy Burden of Obesity: The Economics of Prevention. OECD Health Policy Studies. Paris: OECD; 2019.

² Pampel FC, Denney JT, Krueger PM. Obesity, SES, and economic development: a test of the reversal hypothesis. *Soc Sci Med.* 2012;74(7):1073-1081. doi:10.1016/j.socscimed.2011.12.028.

³ See resolution WHA57.17.

norms; (3) addressing exposure of children to marketing of foods; (4) influencing the food system and food environment; and (5) improving nutrition in neighbourhoods.

13. The 2016 Report of the Commission on Ending Childhood Obesity developed a comprehensive, integrated package of recommendations to address childhood obesity, including: (1) implement comprehensive programmes that promote the intake of healthy foods and reduce the intake of unhealthy foods and sugar-sweetened beverages by children and adolescents; (2) implement comprehensive programmes that promote physical activity and reduce sedentary behaviours in children and adolescents; (3) integrate and strengthen guidance for NCD prevention with current guidance for preconception and antenatal care in order to reduce the risk of childhood obesity; (4) provide guidance on, and support for, healthy diet, sleep and physical activity in early childhood in order to ensure that children grow appropriately and develop healthy habits; (5) implement comprehensive programmes that promote healthy school environments, health and nutrition literacy and physical activity among school-age children and adolescents; and (6) provide family-based, multicomponent, lifestyle weight management services for children and young people who living with obesity.

14. This work, together with the wealth of country experiences developed in the last two decades, provides the basis for the following principles and recommendations. Work is ongoing to expand the evidence basis and develop additional policy approaches and service provision models.

GENERAL PRINCIPLES

15. The prevention and management of obesity require healthy, supportive and conducive environments that allow the consumption of healthy and energy balanced diets, adequate physical activity levels and addressing mental health. The WHO Guidelines on sugars intake for adults and children¹ recommend a level of consumption of free sugars that is lower than 10% of total energy, possibly lower than 5%. The WHO guideline on physical activity and sedentary behaviour for children, adolescents, adults and older adults recommend that children and adolescents do at least 60 minutes a day of moderate- to vigorous-intensity physical activity across the week and that adults should do at least 150–300 minutes of moderate-intensity aerobic physical activity; or at least 75–150 minutes of vigorous-intensity aerobic physical activity; or an equivalent combination of moderate- and vigorous-intensity activity throughout the week. Adaptation of recommended physical activity might be needed in the ageing population.

16. Actions for overweight and obesity prevention and management need to adopt systemic approaches from specific areas or actions, including:

- a whole-of-government and whole-of-society approach;
- a life-course approach, in which primary preventive efforts are likely to have optimal effects if started in early childhood with parental involvement;²
- integrated health services that provide a continuum of care, such as health promotion, disease prevention, diagnosis, treatment and management.

¹ Guideline: sugars intake for adults and children. Geneva: World Health Organization;2015.

² Wilkinson TM. Obesity, equity and choice. *J Med Ethics*. 2019 May;45(5):323–328. doi: 10.1136/medethics-2018-104848.

17. Policymakers need to ensure the impact of policies on gender across the life course, in all socioeconomic groups and in vulnerable populations. The environmental, social and commercial determinants of overweight and obesity should also be taken into consideration. A human rights approach is important both to strengthen the rationale for action and to guide policy choices.

RECOMMENDED ACTIONS FOR GOVERNMENTS

18. Apply multisectoral and Health in All Policies approaches, actions and strategies at the different levels of the obesity causal chain, since the prevention and management of obesity can only be achieved by simultaneously influencing public policies in multiple domains. Those should address health, food systems, social protection, the built environment and physical activity, finance and trade, health literacy and education, among others. Comprehensive and evidence-informed national action plans for the prevention and management of obesity in all age and population groups should also be developed.

Health

19. Provide a continuum of care by implementing health promotion, disease prevention, diagnosis, treatment and management of obesity, as components of the UHC national plan.

20. Include obesity prevention and management in the primary care package. Health care benefit plans should include coverage of a range of obesity prevention and management services in order to avoid out-of-pocket fees for affected populations and their families.

21. Provide dietary, weight and breastfeeding counselling for both mother and child as part of antenatal and postnatal care, together with physical activity counselling and tobacco cessation, and measure gestational weight gain. Promote, protect and support breastfeeding, including the full implementation of the International Code of Marketing of Breast-Milk Substitutes and follow-up resolutions, and implement the Baby-Friendly Hospital Initiative.

22. Implement the WHO guideline to support PHC workers to prevent, identify and manage childhood overweight or obesity¹ in the context of national priorities. Specific actions include the following.

(a) Measure the weight and height of all infants and children less than 5 years old presenting to PHC facilities in order to determine weight-for-height and nutritional status according to WHO Child Growth Standards.^{2,3} Comparing a child's weight with norms for its length/height is an effective way to assess for both wasting and overweight.

(b) Provide counselling to parents, family members and caregivers on health promotion, specifically on healthy diet and physical activity, including by promoting and supporting

¹ Guideline: assessing and managing children at primary health facilities to prevent overweight and obesity in the context of the double burden of malnutrition. Updates for the integrated management of childhood illness (IMCI). Geneva: World Health Organization; 2017.

² WHO Child Growth Standards for children under 5 years.

³ WHO Child Growth Reference for children aged between 5–19 years.

exclusive breastfeeding in the first 6 months after birth and continued breastfeeding until 24 months or beyond after birth,¹ linking such support with an appropriate nutritional plan.

(c) Develop a multidisciplinary plan for the management of children with obesity through a family-centred approach. This can be done by a health care professional at PHC level and/or at community level if adequately trained or at a referral clinic or local hospital.

23. Ensure that health promotion activities, including weight monitoring and management, are equitably offered and progressively implemented for people of all ages, including as part of UHC, and that people with obesity have access to trained health care professionals, weight measurement and screening, healthy nutrition, physical activity, psychological support, counselling, pharmacotherapy and surgery.

24. Integrate obesity prevention and management into multidisciplinary clinical teams to ensure that people with obesity receive adequate support and treatment, including for the comorbidities and co-conditions (mental health and disability) of obesity. Promote and provide equitable access to quality care.

25. Ensure that a sufficient number of health care professionals are adequately trained on obesity prevention and management through pre-service and post-service education.

Food systems

26. Improve the accessibility and affordability of healthy diets for the entire population by taking the following actions.

(a) Build a more coherent and enabling agricultural policy to reinforce sustainable food system for the provision of a safe and healthy diet, with reduced daily calories from fats and sugars, and increased number of daily portions from whole grains, legumes, nuts, vegetables and fruits.² This includes encouraging food manufacturers to replace and/or reformulate their products.

(b) Shape the food environment (including digital environments)³ through fiscal and price policies (taxation and incentives) that emphasize the consumption of whole grains, legumes, nuts, vegetables and fruit and reduce the demand for products high in fats, sugars and salt/sodium.

(c) Regulate the marketing of foods and beverages that are high in fats, sugars and salt/sodium, as well as the marketing of breast-milk substitutes and toddler milk, including digital marketing.

(d) Establish nutrition labelling to support consumers' understanding of nutrient contents in food, including through easy-to-understand information at the point of choice (e.g. through front-of-the-pack nutrition labelling or menu labelling).

(e) Design public food procurements and service policies that support procuring, distributing, selling, and/or serving foods that support healthy diets in schools and other public institutions,

¹ Guideline: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services. Geneva: World Health Organization; 2017.

² Obesity. Geneva: World Health Organization (https://www.who.int/health-topics/obesity#tab=tab_3, accessed 1 December 2021).

³ Digital food environments. Factsheet. Geneva: World Health Organization; 2021.

such as government offices, childcare centres, nursing homes, hospitals, health centres, community centres, military bases and prisons.¹

Social protection and welfare

27. Design social protection programmes for healthy and sustainable food (including cash transfers) that facilitate the access to healthy diets and promote sustainability and socioeconomic equity. Such programmes can also help reduce gaps across food systems by linking agroecological small-scale producers and food systems operators to programmes and thereby promoting a virtuous and equitable system among beneficiaries and providers.

Built environment and physical activity

28. Engage city-level governments in facilitating the access to healthy diets, such as through the establishment of fresh food markets and through zoning policies, as well as in the promotion of physical activity, such as through active mobility. The majority of the world's population live in environments in which the proliferation of cheap and available high energy-density food dominates and reduced opportunities to be physically active are leading to excess weight gain.

29. Adopt and implement WHO's guidelines and policy recommendations on physical activity and sedentary behaviour. WHO guidelines provide details for different age groups and specific population groups on how much physical activity is needed for good health.

30. Implement the recommended policy actions outlined in the WHO global action plan on physical activity 2018–2030, which provides recommendations on how countries can: (1) create positive social norms and attitudes by enhancing knowledge of the multiple benefits of regular physical activity, according to ability across the life course; (2) create supportive environments that promote and safeguard the rights of all people to have equitable access to safe places and spaces in their cities and communities, in which they can engage in regular physical activity; (3) ensure adequate and appropriate programmes and services across key settings that support people of all ages and abilities to engage in regular physical activity as individuals, families and communities; and (4) strengthen governance, data systems and investments to implement effective and coordinated international, national and subnational action in order to increase physical activity and reduce sedentary behaviour.

Health literacy and education

31. Develop, adapt and implement national food-based dietary guidelines (FBDGs), which are among other things tools for promoting desirable food consumption patterns and improving nutritional well-being. FBDGs translate science-based guidance on diet, nutrition and health relationship into food-based guidance and messages, taking into consideration country contexts, vulnerable groups, populations' nutritional status, food availability, dietary habits and cultural contexts. FBDGs also serve as a tool for implementing national nutrition policies and programmes and provide guidance for food and agriculture policies.²

¹ Raine KD, Atkey K, Dana L, Ferdinands A, Beaulieu D, Buhler S, et al. Healthy food procurement and nutrition standards in public facilities: evidence synthesis and consensus policy recommendations. *Health Promot Chronic Dis Prev Can.* 2018; 38(1): 6–17. doi: 10.24095/hpcdp.38.1.03.

² Herforth A, Arimond M, Álvarez-Sánchez C, Coates J, Christianson K, Muehlhoff E. A Global Review of FoodBased Dietary Guidelines. *Adv Nutr.* 2019;10(4):590–605. doi: 10.1093/advances/nmy130.

32. Implement campaigns for the promotion of healthy diets and physical activity to complement other actions that shape the food environment and orient people's lifestyles,¹ as one component of the obesity epidemic response, by collecting behavioural and cultural insights from the social sciences and health humanities to help design behavioural change actions, such as programmes to improve cooking skills.

Monitoring and evaluation

33. Establish surveillance systems, including to monitor the weight, height, dietary intake and physical activity levels of individuals of all age groups.

34. Monitor and evaluate policy and programme implementation in different sectors, including to assess access to quality care and clinical interventions, the capacity of health care workers, the availability of healthy foods and the impact of actions taken on obesity reduction across the life course.

RECOMMENDED ACTIONS FOR OTHER SOCIETAL ACTORS

Civil society

35. Encourage governments to develop ambitious national responses in order to increase the availability, accessibility and affordability of healthy foods; promote the uptake of healthy diets and physical activity; and support the implementation and assess progress of related policies.

36. Ensure and amplify the voices of, and raise awareness about, people living with or affected by obesity.

37. Mobilize the public to increase popular demand for obesity-prevention policies, including on the refinement and streamlining of public information; the identification of effective obesity frames for each population; the strengthening of media advocacy; the building of citizen protest and engagement; and the development of a receptive political environment, with change agents embedded across organizations and sectors.

Academia

38. Consolidate and expand the evidence base for obesity causes, determinants and consequences and for responses at individual, community and societal levels.

39. Design and implement policy evaluation programmes to assess the impact, feasibility and scalability of recommended interventions associated with cost-effectiveness analysis.

Economic operators in the food system

40. Guarantee access to healthy diets, from production to distribution and promotion. Manufacturers should reformulate their products, particularly those intended for children (reducing sugar and salt content), and reduce portion sizes. All companies can offer healthy diets in their workplace canteens. Food distribution chains might facilitate the access to fresh products, particularly fruit and vegetables,

¹ Updated Appendix 3 to the NCD-GAP. Geneva: World Health Organization; 2017.

and support their promotion through adequate product placement. Catering firms can take steps to align their offers with national food-based dietary guidelines.

Economic operators in the sports, exercise and recreation industries

41. Strengthen the promotion and provision of physical activity in the workplace, improve access and affordability to gyms, clubs and recreation centres, promote wearable technologies and support strengthening the provision of physical education and school sports for all children.¹

RECOMMENDED ACTIONS FOR WHO

Guidance and tool development

42. Expand guidance to health care professionals on the prevention and management of obesity in all age groups, including brief interventions.

43. Translate normative and technical guidance into operational manuals and tools and integrated approaches that can be adopted by Member States.

44. Advocate for the universal implementation of WHO guidance on healthy diets and policies intended to shape the food environment in order to ensure that all people have access to services to prevent and manage overweight and obesity, in all age groups and including in vulnerable and displaced populations.

45. Document and disseminate the good practices adopted by governments in the response to the prevention and management of obesity.

46. Engage other UN agencies with shared mandates in this area, such as UNICEF and the Food and Agriculture Organization of the United Nations.

Capacity-building of service providers

47. Contribute to increasing the number of health care professionals who are trained in nutrition and ensure the quality of their competencies and services provided. Most health care professionals are not adequately trained to address diet, physical activity and nutrition-related issues, including the prevention and management of obesity, thereby impacting the quality of care for the affected population and their family members and/or the caregivers. Training in nutrition and the prevention and management of obesity is not a mandatory requirement for the curricula of medical, nursing and of other professional schools in many countries.² Increasing the number of health care professionals who are provided with quality training in the prevention and management of obesity, including in preservice education, will improve the access, coverage and quality of the services provided to people living with obesity.

¹ Huang TTK, Cawley JH, Ashe M, Costa SA, Frerichs LM, Zwicker L, et al. Mobilisation of public support for policy actions to prevent obesity. *Lancet*. 2015;385(9985):2422–31. doi: 10.1016/S0140-6736(14)61743-8.

² Kris-Etherton PM, Akaba SR, Douglas P, Kohlmeier M, Laur C, Lenders CM, et al. Nutrition competencies in health professionals' education and training: a new paradigm. *Adv Nutr*. 2015;6(1):83–7. doi: 10.3945/an.114.006734.

Policy dialogue and implementation support

48. Engage in strategic and policy dialogues with ministries of health, making the case for action and the use of evidence-informed and cost-effective policy tools, as most appropriate to the country context. WHO will focus its efforts and resources on a number of priority countries with a high burden of overweight and obesity and who demonstrate a readiness to act.
49. Monitor the adoption of policies and their impacts and support country policy implementation.

PROPOSED TARGETS

Outcome targets

50. The following outcome targets and indicators have been endorsed by the World Health Assembly and the United Nations General Assembly.
- (a) Halt the rise of obesity in children under 5,¹ adolescents and adults² by the year 2025 (against a 2010 baseline).
 - (b) End all forms of malnutrition by the year 2030 (against a 2015 baseline).
 - (c) Reach 3% or lower prevalence of overweight in children under five years of age by 2030.

Intermediate outcome targets

51. The establishment of intermediate outcome targets and process targets might benefit the scale-up of action. Intermediate outcome targets are linked to key steps on the causal pathway to the development of obesity. The targets may be related to the quality of the diet and to physical activity levels. Proposed intermediate outcome targets include the following.
- (a) In both adults and children, WHO recommends reducing the intake of free sugars to less than 10% of total energy intake. This target is based on a strong recommendation in the WHO guidelines on sugars intake in adults and children published in 2015.³
 - (b) Increase the rate of exclusive breastfeeding in first 6 months up to at least 50%. This is one of the six global nutrition targets endorsed by the World Health Assembly.⁴
 - (c) A 15% relative reduction in the global prevalence of physical inactivity in adults and adolescents by 2030.⁵ This target was established by the World Health Assembly in 2010 and updated in WHO's global action plan on physical activity 2018–2030).

¹ See resolution WHA65.6, Annex 2.

² See NCD-GAP.

³ Guideline: sugars intake for adults and children. Geneva; World Health Organization (<https://www.who.int/publications/i/item/9789241549028>, accessed 1 December 2021).

⁴ See resolution WHA65.6, Annex 2.

⁵ Using a 2016 baseline.

Process targets

52. Process targets are related to the presence of WHO recommended policies and the effective coverage of services that would lead to the desired changes in intermediate outcomes (diet and physical activity) and in final outcomes (obesity prevalence). Proposed process targets, to be achieved by the year 2030, include:

- (a) increasing the coverage of PHC services that include the prevention, diagnosis and management of obesity in children and adolescents;
- (b) increasing the nutrition professional density to a minimum level of 10/100 000 (rationale: indicator already included in the Global Nutrition Monitoring Framework¹ and reported in the Nutrition Landscape Information System;² baseline 2016–2017: 2.2/100 000);
- (c) increasing the adoption of regulations to control the marketing of foods and non-alcoholic beverages to children (indicator collected through the Global Nutrition Policy Review³ and NCD Country Capacity Survey;⁴ baseline: 47 countries (Global database on the Implementation of Nutrition Action));
- (d) all countries implement national public education communication campaigns on physical activity (aligned with use within NCD progress monitoring and recommended NCD best buy in 2018); and
- (e) all countries have a national protocol for assessing and counselling on physical activity in primary care (aligned with use within NCD progress monitoring and recommended NCD good buy in 2018).

¹ Global Nutrition Monitoring Framework: operational guidance for tracking progress in meeting targets for 2025. WHO and UNICEF (<https://apps.who.int/iris/bitstream/handle/10665/259904/9789241513609-eng.pdf?sequence=1&isAllowed=y>, accessed 1 December 2021).

² Nutrition Landscape Information System: GNMF Profile (who.int)(NLiS). Geneva: World Health Organization (<https://apps.who.int/nutrition/landscape/global-monitoring-framework>).

³ Global nutrition policy review 2016-2017: country progress in creating enabling policy environments for promoting healthy diets and nutrition. Geneva; World Health Organization (<https://www.who.int/publications/i/item/9789241514873>, accessed 1 December 2021).

⁴ NCD Country Capacity Survey. Geneva: World Health Organization (<https://www.who.int/teams/ncds/surveillance/monitoring-capacity/ncdcs>, accessed 1 December 2021).

ANNEX 10

**DRAFT WORKPLAN FOR THE GLOBAL COORDINATION
MECHANISM ON THE PREVENTION AND CONTROL OF
NONCOMMUNICABLE DISEASES 2022–2025****Mandate**

1. Decision WHA74(11) extends the current terms of reference¹ of WHO's GCM/NCD until 2030 with a mid-term evaluation in 2025.
2. In addition, decision WHA74(11) requests the Director-General to develop, in consultation with Member States and non-State-actors, a workplan for the GCM/NCD to be submitted to the Seventy-fifth World Health Assembly through the 150th session of the Executive Board.
3. In response, the WHO Secretariat has prepared a draft workplan for the GCM/NCD, with an accompanying draft theory of change and logic model.² These documents ensure the following:
 - the continued performance of GCM/NCD, with a more focused approach to the delivery of its functions and with clearly defined objectives and measurable and practical milestones;
 - that the work of the GCM/NCD contributes to the achievement of the objectives set in WHO's NCD-GAP;³ and
 - that the GCM/NCD carries out its functions in a way that is integrated with the WHO's ongoing work on NCDs.

Consultative process

4. The process to develop the draft workplan and its accompanying draft theory of change and logic model has been comprehensive and consultative across WHO, Member States and non-State actors.²
5. This process culminated with the following consultations:
 - a two-week web-based consultation on the zero draft workplan and draft theory of change narrative that was open to Member States, UN agencies and non-State-actors;
 - an informal virtual consultation on the draft workplan and draft theory of change narrative with non-State actor participants of the GCM/NCD;
 - an informal virtual consultation on the draft workplan and draft theory of change narrative with Member States; and

¹ See document A67/14 Add.1.

² See <https://www.who.int/news-room/articles-detail/who-gcm-ncd-workplan-2022-2025-consultation>, accessed 1 December 2021.

³ Endorsed in resolution WHA66.10.

- additional discussions and guidance from WHO NCD-related focal points across headquarters, regional and country offices.

Scope, purpose and modalities

6. The draft workplan is organized around the priority areas of work provided for the GCM/NCD by Member States in decision WHA74(11). In addition, guidance and recommendations provided in the preliminary and final^{1,2} evaluations of the GCM/NCD and in the midpoint evaluation of the implementation of WHO's NCD-GAP³ have informed the draft workplan and draft theory of change and logic model. The priority areas ensure a more focused approach to the implementation of the five functions, in line with the scope and purpose of the GCM/NCD, as provided by its terms of reference, as well as with the WHO's NCD-related programmes.

7. Implementation models across all activities of the draft workplan are designed to formalize more effective engagement with GCM/NCD participants, improve the accountability and responsiveness of GCM/NCD to the needs of Member States and enhance country-level impacts in order to ensure focused support implementation of the NCD-GAP through strengthened national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of NCDs and address their risk factors.

8. During the implementation of the workplan, the GCM/NCD will continuously engage with relevant stakeholders across WHO, including regional and country offices, in order to amplify and foster meaningful engagement among WHO, Member States and non-State-actors, including civil society, people living with or affected by NCDs, relevant private sector entities and academia. Performance measures will track progress towards objectives over time and will inform timely adaptation.

9. This draft workplan and the related draft theory of change and logic model will be refined based on continuing input from Member States and the ongoing strategic planning process and will be enhanced by qualitative and quantitative data, case studies and other performance measures.

PRIORITY AREAS, ACTIONS AND PERFORMANCE MEASURES

Priority area 1

Operational backbone for knowledge collaboration and the dissemination of innovative multistakeholder responses at country level, based on raising awareness and promoting knowledge collaboration among Member States and non-State actors and on co-creating, enhancing and disseminating evidence-based information to support governments in adopting effective multisectoral and multistakeholder approaches.

Action 1.1: Enhance and realign the Knowledge Action Portal (KAP) to support GCM/NCD activities and GCM/NCD participants.

¹ See document A71/14 Add.1.

² See document A74/10 Add.2.

³ See document A74/10 Add.1.

Activity 1.1.1 (2022–2025): Expand data and information, including stocktaking of global, regional and country-level multisectoral and multistakeholder experiences, community engagement and action, best practices and success stories from GCM/NCD participants.

Expected outcome: KAP updated to include up-to-date and relevant information on multisectoral and multistakeholder experiences, community engagement and action that is utilized by countries and GCM participants to inform national and subnational plans and strengthen country-level responses.

Performance measures:

- KAP site traffic increased by 25% by 2025 over 2021 baseline (including page views; click-through rate, time on site).
- Number of submissions of content by WHO, Member States and other GCM/NCD participants from 2022 to 2025.

Activity 1.1.2 (third quarter 2022): Adapt KAP to enhance the functionalities for improved knowledge collaboration of GCM/NCD participants across the workplan activities.

Expected outcome: Refined KAP utilized by countries and other WHO stakeholders to enhance engagement and collaboration and align GCM/NCD outputs with country needs.

Performance measures:

- KAP site traffic increased by 25% over 2021 baseline by 2025 (including page views, click-through rate, time on site).
- Analytics of unique visits to specific pages enhanced or added to the KAP since 2021.

Action 1.2: Provide information on the health needs of marginalized groups and population groups living in vulnerable situations in order to advance equity in the prevention and control of NCDs.

Activity 1.2.1 (2022–2025): Conduct the “NCD Voices in the Decade of Action” webinar series.

Expected outcome: national NCD responses informed by the perspective and health needs of marginalized groups and vulnerable populations, ensuring that the most at risk are not left behind.

Performance measures:

- At least 10 webinars launched by 2025.
- Analytics on participation and satisfaction with the webinars through polling surveys of participants.

Priority area 2

Enabler for the global stocktaking of multistakeholder action at country level and for co-designing and scaling up innovative approaches, solutions or initiatives to strengthen effective multisectoral and multistakeholder action.

Action 2.1: Develop an online registry and a special report on successful multisectoral actions for the prevention and control of NCDs and mental health conditions.

Activity 2.1.1 (2022–2025): Develop and manage an online registry of examples of national or subnational multisectoral approaches and experiences on the prevention and control of NCDs and mental health conditions, including information on evidence underlying or evaluating the approaches.

Expected outcome: registry utilized by countries to build on lessons learned for effective multisectoral actions on NCDs and mental health conditions at the national and subnational levels.

Performance measures:

- Balanced representation of Member States in registry, with a special focus on experiences of low- and middle-income countries across WHO regions.
- Analytics of unique visits to registry and download of case studies in the first year after its launch.

Activity 2.1.2 (2023): Develop a special report on multisectoral approaches and experiences at national or subnational levels across WHO regions for the prevention and control of NCDs and mental health conditions.

Expected outcome: special report with analysis of best practices, experiences and approaches utilized by Member States and other stakeholders to develop national and subnational multisectoral responses for the prevention and control of NCDs and mental health conditions.

Performance measures:

- At least 100 participants attending the launch event or other activities, with representation of Member States across all WHO regions.
- Analytics of unique downloads of special report in the first year after its launch.

Action 2.2: Second general meeting of the WHO's GCM/NCD.

Activity 2.2.1 (2023): Convene general meeting of GCM/NCD, including the participation of people living with NCDs.

Expected outcome: meeting of GCM/NCD participants to share lessons learned, assess uptake and effectiveness of resources, as well as to galvanize commitments and accelerate multisectoral and multistakeholder action at the local, national, regional and global levels to meet the NCD targets of the NCD-GAP as well as SDG target 3.4 and the other

NCD-related goals and targets of the 2030 Agenda (outcomes will inform the adaptation required by the GCM/NCD for the next implementation phase).

Performance measures:

- At least 100 Member States and 80% of GCM/NCD participants attending the general meeting, with representation of Member States across all WHO regions and income settings.
- Report emanating from general meeting of the GCM/NCD, including meaningful contributions from GCM/NCD participants and success stories from Member States across WHO regions and income settings on implementation of multisectoral and multistakeholder responses with the support of the GCM/NCD.

Priority area 3

Providing and updating guidance to Member States on engagement with non-State actors, including on the prevention and management of potential risks.

Action 3.1: Provide guidance to Member States concerning benefits and risk management approaches when considering engagement with non-State-actors, beginning with the private sector, for the prevention and control of NCDs, through a tool to guide the informed decision-making process by countries, building on the guidance, experience and expertise of WHO and other relevant stakeholders.

Activity 3.1.1 (fourth quarter 2022): Conduct a comprehensive consultative process across WHO, Member States and relevant non-State actors in order to develop a tool to guide decision-making by Member States on private sector engagement for prevention and control of NCDs.

Expected outcome: Member States supported in the use of risk management approaches in considering engagement with non-State actors, including the private sector, taking into account national NCD priorities to achieve SDG target 3.4, while assessing benefits against risks, including mitigation strategies.

Performance measures:

- Engagement across the three levels of WHO, Member States and GCM/NCD non-State actors participants to support the development of the tool.
- At least 100 participants attending the launch event for the tool, with representation of Member States across all WHO regions and income settings.
- Analytics of unique downloads of the tool in in the first year after its launch.

Activity 3.1.2 (2024–2025): Provide capacity development to countries in contextualizing and using the WHO tool to support benefit- and risk-informed decision-making on private sector engagement for the prevention and control of NCDs.

Expected outcome: capacity of Member States to make informed decisions on engagement with the private sector for the prevention and control of NCDs enhanced by the tool and by WHO's technical support for its implementation in order to respond to national priorities

and achieve SDG target 3.4, while giving due regard to assessing and managing benefits and risks.

Performance measures:

- At least six countries supported to implement the tool by 2025, including at least four low- and middle-income countries.
- Uptake by WHO regional and country offices (e.g. specific requests to headquarters by country offices and/or regional offices, adaptation of the tool by regional offices/country offices, inclusion in WHO toolkits and featuring of the tool on institutional websites).

Action 3.2: Support the WHO Civil Society Working Group for meaningful civil society engagement for NCDs and UHC.

Activity 3.2.1 (2022–2025): Establish third phase of WHO Civil Society Working Group (CSWG) on NCDs.

Expected outcome: civil society guidance and recommendations provided to WHO Director-General in support of effective policies, programmes and services for the prevention and control of NCDs and WHO's engagement with civil society for NCDs operationalized.

Performance measures:

- Membership increased from baseline 2021, with balanced representation across NCD and NCD-related areas and people living with NCDs and mental health conditions, as well as across WHO regions and income settings.
- Number of statements, policy briefs, webinars, advocacy products and side events delivered, presented and communicated through WHO channels by 2025, per the terms of reference of the CSWG, benchmarked against previous years.
- Summary report of CSWG deliverables disseminated through GCM/NCD platforms and dialogues.

Priority area 4

Global facilitator for the strengthened capacity of Member States and civil society to develop national multistakeholder responses for the prevention and control of NCDs.

Action 4.1: Develop and support implementation of a guidance framework for national multisectoral and multistakeholder coordination mechanisms for the prevention and control of NCDs and mental health conditions.

Activity 4.1.1 (second quarter 2022): Develop a WHO guidance framework for national multisectoral and multistakeholder coordination mechanisms for the prevention and control of NCDs through a co-creation approach with Member States, civil society organizations, people living with NCDs and other stakeholders.

Expected outcome: Heads of State and Government supported by WHO in fulfilling their commitment to provide strategic leadership for NCD responses by promoting policy coherence and coordination for the development of whole-of-government, Health in All Policies approaches and for the engagement of stakeholders in whole-of-society action, in line with national NCD and SDG action plans and targets, through the establishment or strengthening of national multisectoral and multistakeholder mechanisms.

Performance measures:

- Engagement across the three levels of WHO, Member States and additional GCM/NCD participants to support the development of the guidance framework.
- At least 100 participants attending the launch webinar, with balanced representation of Member States across WHO regions and a special focus on experiences of low- and middle-income countries.
- Analytics of unique downloads of the guidance framework in the first year after launch.

Activity 4.1.2 (2022–2025): Provide capacity development to countries to contextualize and use the WHO guidance framework for national multisectoral and multistakeholder coordination mechanism in order to develop or strengthen country-tailored multisectoral and multistakeholder coordination mechanisms.

Expected outcome: guidance framework and online resources utilized by countries to establish or strengthen national and subnational coordination mechanisms in order to enhance policy coherence and coordination for the development of whole-of-government, Health in All Policies approaches and for the engagement of stakeholders in whole-of-society action, in line with national NCD targets and SDG 3.4.

Performance measures:

- Technical support provided to at least six countries, including low- and middle-income countries, by 2025.
- Guidance framework presented and discussed in relevant international and regional forums.
- Uptake by WHO regional and country offices (such as specific requests to headquarters by country offices and/or regional offices, adaptation of the guidance framework by country offices, its inclusion in WHO toolkits and its featuring of in institutional websites).

Action 4.2: Strengthen the role of GCM/NCD participants in accelerating multistakeholder actions towards meeting SDG target 3.4.

Activity 4.2.1 (2022–2025): Develop and implement an engagement strategy with GCM/NCD participants.

Expected outcome: engagement strategy disseminated and utilized by GCM/NCD to improve coordination and collaboration with and among GCM/NCD participants to support WHO and Member States in enhancing multistakeholder action at the local, national,

regional and global levels in order to contribute to the implementation of the NCD-GAP, while safeguarding WHO and public health from any undue influence by any form of real, perceived or potential conflicts of interest.

Performance measures:

- 80% of GCM/NCD participants participating in the development of the engagement strategy, with balanced representation of the four GCM/NCD constituencies.
- At least 50% of GCM/NCD participants supporting WHO and Member States enhance multistakeholder action through the implementation of activities of the GCM/NCD workplan.
- Number of Member States across WHO regions and WHO regional and country offices supported by the GCM/NCD.

Activity 4.2.2 (2025): Produce case studies on the commitments and contributions of GCM/NCD participants to support countries in advancing the implementation of the NCD-GAP and accelerate progress towards meeting SDG target 3.4.

Expected outcome: case studies utilized by Member States and non-State actors to inform more effective national and subnational multistakeholder responses.

Performance measures:

- Case studies from each of the four constituencies of GCM/NCD participants published by 2025.
- Analytics of unique downloads of case studies in the first year after their launch.

14. Priority area 5

Convener of civil society, including people living with NCDs, to raise awareness and build capacity for their meaningful participation in national NCD responses.

Action 5.1: Support the co-development of a WHO framework for the meaningful engagement of people living with NCDs and mental health conditions.

Activity 5.1.1 (fourth quarter 2022): Develop a WHO framework on the meaningful engagement of people living with NCDs and mental health conditions.

Expected outcome: WHO framework utilized by headquarters, regional and country offices and Member States to meaningfully engage people living with NCDs and mental health conditions in the co-development and co-design of NCD principles, policies, programmes and services.

Performance measures:

- WHO framework includes balanced representation of Member States, with special focus on experiences of low- and middle-income countries across WHO regions.

- Analytics of unique downloads of the WHO framework by 2025.
- At least six countries supported in implementing the framework, including at least four low- and middle-income countries, by 2025.
- WHO framework presented and discussed in relevant international and regional forums (such as informal consultations, workshops, events and symposiums).
- Uptake by regional and country offices (such as specific requests to headquarters by country offices and/or regional offices, adaptation of the WHO framework, its inclusion in WHO toolkits and its featuring in institutional websites).

Activity 5.1.2 (third and fourth quarters 2023): Develop policy briefs with regional offices on the principles, policies, strategies and structures necessary for meaningful engagement of people living with NCDs and mental health conditions.

Expected outcome: policy briefs utilized by Member States to inform country-level engagement with people living with NCDs and mental health conditions.

Performance measures:

- Six policy briefs developed and utilized by six Member States, including at least four low- and middle-income countries, by 2024.
- Analytics of unique downloads of the policy briefs by 2025.

Activity 5.1.2 (January 2023): Conduct cycles 2, 3 and 4 of the NCD Lab in order to identify innovations that inform NCD- and NCD-related global health agendas.

Expected outcome: innovative solutions, contextualized to country context and available online, that target policy-level change, systems change or individual-level change, identified and disseminated through WHO platforms.

Performance measures:

- Labs conducted for cycles, 2, 3 and 4 for all thematic areas by 2023.
- 500 proposals submitted over the next two cycles by 2023.
- Analytics on unique views of NCD Lab webpages.

Action 5.2: Facilitate the meaningful engagement of people living with NCDs and mental health conditions within WHO and with Member States.

Activity 5.2.1 (2022–2025): Establish and service a WHO symposium on people living with NCDs and mental health conditions in order to facilitate meaningful engagement and dialogue, support a co-creation process and mobilize individuals with lived experience for a highly successful fourth high-level meeting of the United Nations General Assembly on the prevention and control of noncommunicable diseases in 2025.

Expected outcome: ongoing dialogue and meaningful engagement with people living with NCDs and application of their lived experience and lessons learned that informs WHO's strategy to deliver on its key strategic objectives for the prevention and control of NCDs and mental health conditions.

Performance measures:

- Inclusive and diverse participation in a WHO symposium on people living with NCDs and mental health conditions, with structures that ensure adequate representation of different lived experiences, stakeholder groups, geographical regions and income settings.
- At least three WHO symposiums on people living with NCDs and mental health conditions held by 2025.
- At least 10 advocacy activities and outputs completed before the fourth high-level meeting of the United Nations General Assembly on the prevention and control of noncommunicable diseases in 2025.

Activity 5.2.2 (second to fourth quarters 2023): Develop guidance on implementation of the guidance framework on the meaningful engagement of people living with NCDs and mental health conditions at country and regional levels.

Expected outcome: Guide, including adaptation process, conceptualization of the guidance framework, adaptation monitoring and evaluation and adaptation governance, utilized by country offices to support meaningful engagement with people living with NCDs and develop country-tailored national and subnational policies and programmes.

Performance measure: guide accessed by six Member States, including at least four low- and middle-income countries, and utilized to inform national plans by 2025.

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